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Nintendo Archives

From the makers of retro GAMER

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Digital Edition

FUTURE

THIRD EDITION

THE ULTIMATE COLLECTOR'S GUIDE TO CLASSIC NINTENDO

Welcome to

Nintendo Archives

No gaming company has a legacy as rich and as diverse as Nintendo's. Originally founded in 1889, the Japanese company sold everything from Hanafuda playing cards to mechanical toys before moving into videogames during the mid Seventies, eventually finding huge success in the arcades with the 1981 hit, Donkey Kong. Nintendo found further fame with the launch of the Famicom in 1983, which is better known in the west as the NES. Supported by great games, including Super Mario Bros., The Legend Of Zelda, Metroid and Duck Hunt, the NES transformed Nintendo into one of the most powerful players in the industry and as companies like Atari and Sega fell by the wayside, Nintendo continued to gather momentum releasing the Game Boy, Super Nintendo, Nintendo 64 and countless other consoles and handhelds. It's now finding phenomenal success with the Switch and continues to deliver great games for its flagship franchises.

To celebrate Nintendo's continued success, we've dug through the Retro Gamer archives to deliver some of our best Nintendo-themed content, concentrating on the many consoles, franchises and handhelds that have helped the Kyoto-based giant turn into one of gaming's biggest success stories. Enjoy.

In association with retro GAMER magazine

FUTURE

Nintendo Archives

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Nintendo Archives

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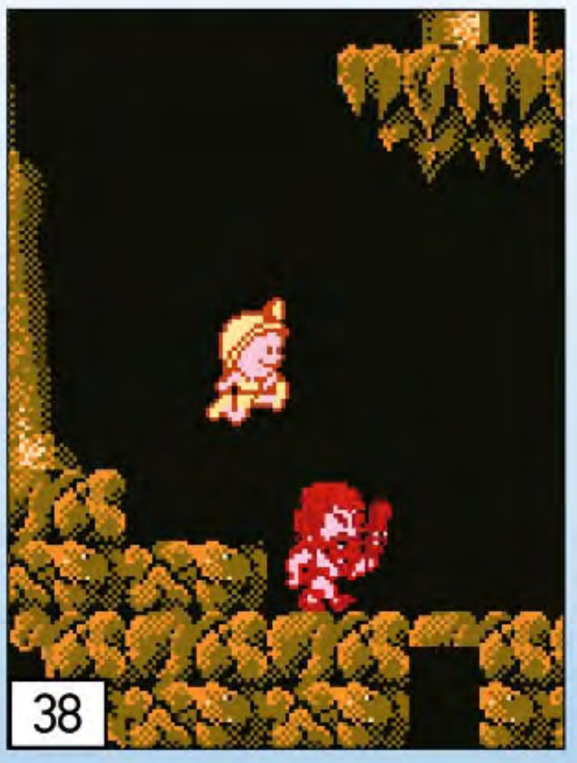

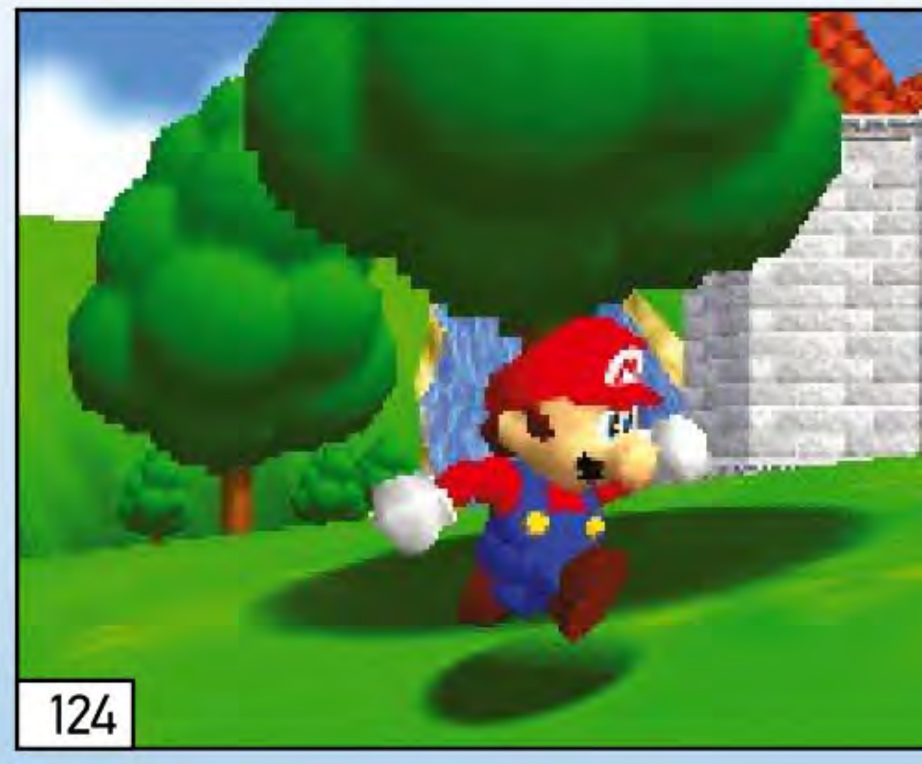

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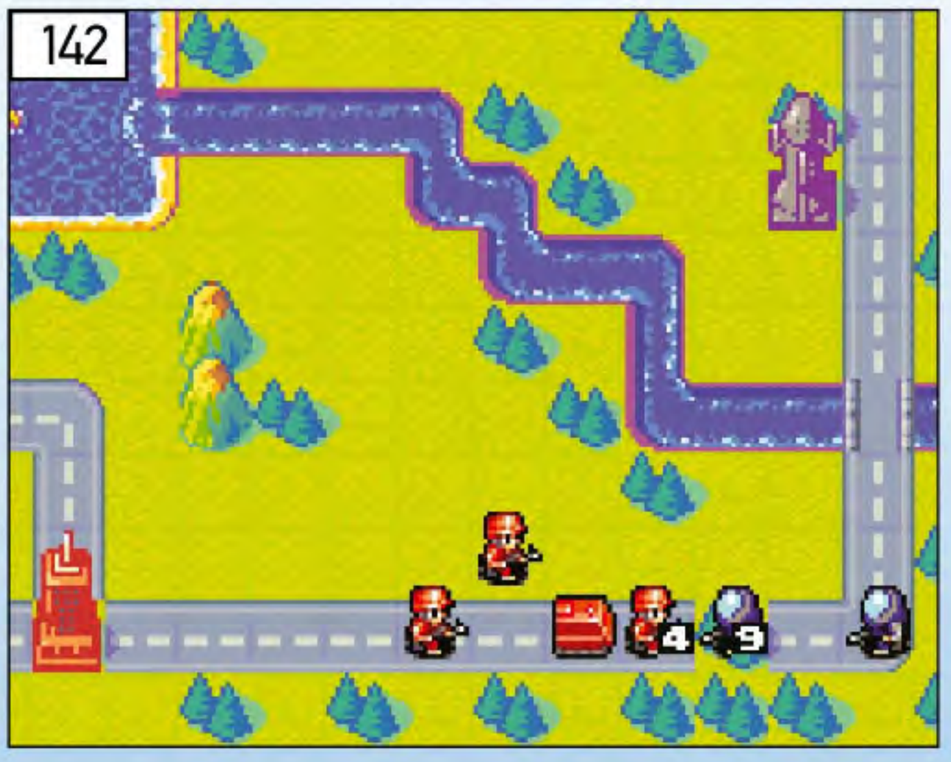

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FROM THE retro GAMER ARCHIVES

The History of Nintendo

Arguably the most famous videogame company in the world, Nintendo has a long history. Join Damien McFerran as he digs deep into its past, present and future

The games industry has undergone seismic levels of change over the past few decades, but since the Eighties one name has stood out as a constant in the ever-shifting sands of interactive entertainment: Nintendo. At one point, Nintendo was a brand totally and utterly synonymous with videogames as a medium, such was the company's domination of the console market. Since the glory days of the NES we've seen the Nintendo rollercoaster dip and rise; systems like the SNES, Game Boy and Wii have achieved the kind of critical and commercial success that their rivals could only dream of, while missteps such as the Virtual Boy and the Wii U have proven that, despite its legendary status, Nintendo is just as prone to mistakes as any other corporation. Arguably one of the most influential companies operating in the videogame space, Nintendo has sold over 670 million units of hardware and 4.23 billion units of software to date, and despite the less-than-stellar performance of its most recent home console, is still a creative force to be reckoned with. With the company planning its next console and preparing to take its first tentative steps into the world of smartphone gaming, now is the perfect time to look back on its illustrious history and chart the highs and lows which have made Nintendo such an iconic and noteworthy challenger in the interactive entertainment arena.

Before gaming

Nintendo may have joined the videogame industry around the same time as companies such as Sega, Namco, Taito and Atari, but it has a history that far outstrips these firms – and every other major player in the videogame arena. "Nintendo was founded in 1889 as manufacturer of playing cards," says Erik Voskuil, founder of Before Mario, a site devoted to covering Nintendo's early history. Established by Fusajiro Yamauchi in Kyoto, the company would focus almost exclusively on the production of Hanafuda cards for the first 70-odd years of its life. By the Fifties, Fusajiro's grandson Hiroshi had ascended to power and became acutely aware that sticking with playing cards was limiting Nintendo's potential for expansion. He signed licensing deals with Disney to maximise the appeal of its range, but by the Sixties sales had dipped dramatically, forcing a rethink. "In an attempt to grow business, Nintendo started branching out in a wide range of other markets – mostly short-lived endeavours including instant rice, a taxi company and opening a 'Love Hotel' – before settling on toys and games," explains Erik. It would be the arrival of Gunpei Yokoi in the Sixties that would take Nintendo in an exciting ▶

Nintendo Key Players

The key figures from Nintendo's history

FUSAJIRO YAMAUCHI

■ Yamauchi founded Nintendo in 1889 as a playing card business. The company grew rapidly, expanding to nearby Osaka. Yamauchi would retire in 1929, leaving his son-in-law Sekiryo Kaneda in charge of the business. He died from the effects of a stroke in 1940.

HIROSHI YAMAUCHI

■ The grandson of Fusajiro Yamauchi, Hiroshi became the third president of Nintendo in 1947 and would guide the company away from playing cards and into videogames.

SHIGERU MIYAMOTO

■ The creator of some of the most iconic games – including *Super Mario*, *Zelda* and *Star Fox* – Miyamoto joined Nintendo in 1977 and his breakthrough success was the arcade smash-hit *Donkey Kong*.

GUNPEI YOKOI

■ Responsible for some of Nintendo's most successful ventures. He came up with the Game & Watch, Game Boy and produced many famous games. He was killed in a traffic accident in 1997.

MINORU ARAKAWA

■ Hiroshi Yamauchi's son-in-law and the founder and former president of NOA, Arakawa was instrumental in making the NES a success in the US. He is also credited with giving Mario his name.

HOWARD LINCOLN

■ Lincoln assisted Nintendo in its legal case against Universal Studios in 1981. He would join Nintendo in 1983, by 1994 he was chairman. He is the current CEO of the Seattle Mariners baseball team.

SATORU IWATA

■ Iwata started as a programmer at HAL Laboratory. In 2000 he joined Nintendo and two years later assumed the role of company president. Iwata sadly passed away after a battle with cancer.

TATSUMI KIMISHIMA

■ Mintendo's current president, Kimishima was president of NOA from 2002 to 2006. His background is in banking, but he has been with Nintendo since 2000.

▶ new direction. "Yokoi provided Nintendo with its first original toys and laid the foundation for what would eventually become known as Nintendo's approach to product design, practiced to this day," explains Erik. "It was no surprise that his design philosophy was embraced by Nintendo, as his inventions became million-sellers, earning the company lots of cash to fund further growth and more innovations." Yokoi's first best-seller – the Ultra Hand – was created during his initial role as a lowly maintenance engineer. "A lot of connections are often made to the early toys produced by Yokoi in the Seventies, such as the Ultra Machine," says Nintendo Life's Thomas Whitehead. "His role in catching the eye of President Hiroshi Yamauchi cannot be overstated, effectively kicking off the move into videogame entertainment." The Ultra Hand would be the company's first million-selling product, and the follow-up – a baseball pitching device called the Ultra Machine – would be even more successful. The period that followed was packed with invention and innovation, with Yokoi dreaming up products which seemed to capture the imagination of people of all ages. 1969's Love Tester gave young couples the means to 'prove the strength of their relationship', while the Kousenjuu series of lightgun toys allowed the normally withdrawn Japanese public to live out their cowboy fantasies in the comfort and privacy of their own homes. Despite some initial success, these products couldn't give Nintendo the long-term commercial stability that it craved. Given the company's penchant for electronic toys, it is unsurprising that when the home TV gaming revolution began, Nintendo was one of the first Japanese firms to put a product on the market. It distributed the Magnavox Odyssey in 1974, and would produce its own console – the Color TV-Game – three years later. It is at this point that an important figure enters the story. Design student Shigeru Miyamoto was fresh out of college when he joined Nintendo in 1977, and one of his first tasks was to design the casing for one of the Color TV-Game variants.

Entering the arcade

While Nintendo's first forays into the world of domestic gaming were significant, the arcades were where the real money was to be made at the time. Titles like *Space Invaders* and *Pac-Man* had turned into money-spinners, and Yamauchi was keen to muscle in on this lucrative market. Nintendo wasn't totally wet behind the ears when it came to location-based entertainment, though. "Nintendo's first arcade games, launched at around the same time as Atari's *Pong* in the early-Seventies, they weren't videogames but electromechanical lightgun games that incorporated film and later video footage," says Erik. "These were original games, based on Nintendo own very early lightgun toys for use at home, but had no commercial success." The company's first true arcade title was *EVR Race* – designed by Genyo Takeda, who is still with Nintendo today as a technology fellow – and clones of *Breakout* and *Space Invaders* followed. None of these gave the company the smash hit Yamauchi wanted, and 1979's *Radar Scope* almost proved to be the final nail in the coffin. The game had performed well in Japan but had flopped in North America – the market Yamauchi was desperate to crack – and Nintendo was faced with the prospect of disposing of unsold *Radar Scope* cabinets. As resourceful as ever, Yamauchi proposed using the inventory for a new title, and the relatively inexperienced Miyamoto was tasked with creating the concept. 1981's *Donkey Kong* was Nintendo's last throw of the dice, but thankfully it was a triumph and has gone on to become one of the most famous videogames of all time. "*Donkey Kong* was very important," states Erik. "It was a huge arcade hit that established the company as a worldwide player in videogames and put Nintendo Of America on the map. The game design by Miyamoto has been hugely influential in many ways, including being the first platform game to use a jumping character – a jumping character who evolved into one of the most enduring videogame icons." Erik is, of course, referring to Mario, who has gone on to become one of the most recognisable faces in entertainment.

The Golden Years

Donkey Kong was a turning point for Nintendo, and elevated the company's status in North America – arguably the biggest market of them all for videogames. Home conversions quickly followed on the popular consoles of the period, earning *Donkey Kong* and its

» Nintendo found success in its early years with devices such as the Game & Watch and tabletop systems.

"Entering the videogame market with a new system after the big crash of the early-Eighties was a risky decision"

Erik Voskuil

maker even more fame. Nintendo's next venture was with games you could effortlessly slip into your pocket. Inspired by the sight of a businessman idly tapping away at his pocket calculator while on the train to work, Yokoi created the Game & Watch line in 1980. While they used crude LCD visuals and were limited in terms of scope, the range was a massive commercial success and sold over 80 million units between 1980 and 1991. It also inspired a flood of copycat releases from the likes of Tiger and Bandai. "A lot of people were building battery-powered handheld game systems, but they tended to revolve around rudimentary display hardware such as grids of LED lights," says Rare's Paul Machacek. "Whilst the images on the LCD screens that Nintendo used were pre-baked rather than very low resolution software-driven pixels, they were immersive and packed tightly enough to take you beyond noticing such limitations and really get engrossed in the gameplay.

» *Super Mario Bros.* was a huge success for Nintendo, and helped sell its NES console to the masses.

The twin-screened units, preceding Nintendo's DS handheld by decades, seemed particularly futuristic at that time." Erik adds that gameplay was the driving force behind the success of this range. "They were playtested and fine-tuned until the result was a fun and challenging game," he says. "The graphic design and quality finish also played a role. They looked desirable and provided a lot of value, which attracted customers and made them come back for more." The Game & Watch was also notable for introducing the world to another innovation – the Directional Pad, or D-pad as it is now known. Used on the 1982 Game & Watch adaptation of *Donkey Kong*, the pad has since become an ubiquitous feature on pretty much every gaming controller you could mention.

Growing in confidence, Nintendo decided to push forward in the home console arena with a new piece of hardware. 1983's Family Computer – or Famicom as it was more commonly known – launched just as the videogame industry in the west was about to implode. The crash of 1983 destroyed consumer and retailer faith in home gaming, but thankfully it didn't reach the shores of Japan, where the Famicom became a commercial success. By the end of the following year, it was the nation's most popular home console. "Nintendo's first-party titles were a big attraction – *Super Mario Bros.*, *Zelda*, *Metroid* – combined with many fantastic third-party releases, such as *Final Fantasy*, *Dragon Quest* and *Mega Man*," Erik comments. "Nintendo was also lucky with the timing. Entering the market with a new system after the crash was risky, but once it succeeded Nintendo had a monopoly for many years. In this period playing videogames and playing Nintendo were synonymous."

When Nintendo revealed its plans to repackage the Famicom as the NES for release in the west in 1985, many assumed this upstart Japanese firm was crazy. In North America, home consoles were seen as a dead end, but Nintendo persevered and soon enjoyed a near-complete domination of the US market – a mirror of its overwhelming triumph in Japan. It is during this time that the company began a relationship with tiny UK developer Rare. Paul – a Rare employee since 1988 – reveals that the company was set up to fully exploit the success of Nintendo's hardware in the US and Japan. "Just as Ultimate Play The Game had largely been a success in the UK and was not hugely known in those distant territories, so Rare was to conquer abroad where the NES was strongest, and not have the visibility in the UK that Ultimate did for a while," he remembers. In the days before Nintendo invested in Rare, the latter used the former as a sort of guide for quality. Whenever outside games were brought into the studio for inspection and analysis, Rare's founders – the legendary Stamper Brothers Tim and Chris – encouraged its staff to have a hands-on with Nintendo's offerings. "We largely only brought in other titles on Nintendo platforms in the early years because I think Tim and Chris wanted everyone to see that market, and understand what worked and why," continues Paul. "So we were all exposed to a sort of Nintendo ethos – the *Super Mario* series was the true 'North Star' that guided us."

Nintendo would complement the all-conquering NES with the Game Boy in 1989, a handheld console which was a direct successor to the aging Game & Watch line. Another ▶

▶ Yokoi masterpiece, this portable system became a cultural icon and must-have gadget, with many comparing its popularity to that of Sony's Walkman. However, as the Nineties dawned it was becoming abundantly clear that Nintendo no longer had the global games market all to itself. Japanese rivals such as Sega and NEC launched viable challengers at the end of the Eighties– such as the Mega Drive and PC Engine – and these began to slowly but surely chew away at the market share of Nintendo's 8-bit system. In the US, this encroachment was felt especially keenly; an aggressive Sega attacked the NES via a combination of savvy marketing, licensed sports titles and arcade conversions, eventually managing to become the nation's best-selling home console – an event which would have been unthinkable just a few years previously. New blood was needed, and it came in the form of the Super Famicom, or Super Nintendo as it was branded over here in the West.

Regarded by some as Nintendo's best console and one of the most acclaimed home systems of all time, this 16-bit powerhouse played host to some of the period's most critically-lauded videogames. Hits such as *Super Mario World, The Legend of Zelda: A Link To The Past, Secret Of Mana* and *EarthBound* all followed, and when it became clear that 3D visuals were slowly overtaking 2D graphics in terms of popularity, Nintendo was smart enough to make sure that the SNES could stay the course. It introduced the Super FX chip with 1993's *Star Fox*, and gave the console a massive shot in the arm in its battle against the Mega Drive. "Everything came about because of a 3D demo I had developed for the Game Boy," recounts Dylan Cuthbert, former Argonaut staffer who worked on the iconic title. "Jez San, my boss at the time, was showing the demo around at the CES show in America and a Nintendo Of America exec saw it and realised the potential of new technology and hooked everything up very quickly to Nintendo Japan. They flew us to Kyoto and we had lots of meetings, out of one of which, the FX Chip was born." Dylan set up shop in Nintendo's Kyoto HQ for some time afterwards,

Ten innovations Nintendo improved on

How Nintendo helped shape the games industry

DIGITAL CONTROL

■ Joysticks were *the* input method for gaming of the Seventies and Eighties, but were too bulky to be used on portable devices. Nintendo came up with the D-pad and used it on the Game & Watch version of *Donkey Kong* – it has become an essential control method ever since.

KIOSKS COULD BE USED TO PUT NEW GAMES ON OLD ONES

■ The Famicom Disc System is another Japan-only peripheral, and Nintendo introduced kiosks which allowed users to wipe discs and write new games to them for a reduced fee.

WIRELESS DATA TRANSFER

■ The GBC came with an IR port on the top which was pretty much only useful for one thing – exchanging data in the popular RPG *Pokémon*. It was another example of Nintendo leveraging cheap and common tech in new and interesting ways.

THE GAME BOY ADVANCE E-READER

■ Using special bespoke cards and the GBA e-Reader device, it was possible to access special content for certain games. Sadly the peripheral was not a success, but the curio lives on as a collector's item.

THE GAME BOY CAMERA

■ Today, we're used to having a camera at all times thanks to smartphones, but back in the Nineties Nintendo caused a storm by releasing a monochrome snapper for the Game Boy. The pictures were terrible, but they have a strange appeal to them.

MEMORY MANAGEMENT

■ PC owners are used to adding in RAM to improve performance, and Nintendo applied this to the N64. Demanding titles like *Donkey Kong 64, Perfect Dark* and *Zelda: Majora's Mask* worked with the 4MB RAM pack to offer better visuals.

REWRITE, NOT FADE AWAY

■ The 64DD – or 'Bulky Drive' as it was known – never saw release outside of Japan, but the idea was genius. To combat the high cost of N64 cartridges, 64DD games would come on magnetic discs which were cheaper and could be written to.

TOUCHSCREENS

■ Sure, touch panels existed prior to the launch of the DS, but Nintendo's handheld really popularised the technology, introducing it to a new generation of gamers and paving the way for smartphones and tablets.

MOTION CONTROL

■ The Wii might have been underpowered compared to its peers, but the inclusion of motion control helped set it apart in the console war at the time. Nintendo opened up gaming to casual players and sold over 100 million Wii consoles in the process.

AUTOSTEREO-SCOPIC 3D

■ The 3DS introduced glasses-free 3D to the masses in 2011, taking cutting-edge tech and planting it into the handheld. The New Nintendo 3DS refines the tech by using a camera to sense the position of the user's head.

In the Know

■ The actual meaning of the name 'Nintendo' is open to interpretation, but a rough English translation is 'leave luck to heaven'.

■ Before videogames, Nintendo tried to take on Lego with its own range of building blocks, known as the N&B Block.

■ Nintendo was once the sole Japanese distributor of the popular game *Twister*.

■ Lawyer John Kirby – who helped Nintendo win the *Donkey Kong* court case – has a special place in Nintendo history. The character Kirby was named in his honour.

■ *Donkey Kong* was originally supposed to star characters from *Popeye*, but Nintendo failed to secure the licence and Miyamoto had to come up with a new concept.

■ Nintendo owns the Seattle Mariners baseball team.

■ Hiroshi Yamauchi was Nintendo president for more than half a century.

■ The iconic NES Zapper is shaped like a real gun in Japan.

■ Mario's voice has been supplied by actor Charles Martinet for 20 years.

■ Nintendo may be family friendly today, but in 1970 it produced a series of pin-up playing cards featuring nude women.

■ Current Nintendo Of America president Reggie Fils-Aime previously worked at Pizza Hut.

■ The amazing sound chip inside the SNES was designed at Sony, by PlayStation creator Ken Kutaragi.

■ Nintendo Of America produced its own magazine during the NES era named *Nintendo Power*, which only recently closed in 2012.

■ Nintendo's taxi service – called Daiya – was successful initially, but succumbed to pressure from labour unions and eventually closed.

■ The code-name for the N64 was Project Reality.

VIRTUAL BOY
0%

NES
0%

GAMECUBE
30%

Wii U GAMEPAD
7%

Your favourite Nintendo controller

Wii
7%

SNES
40%

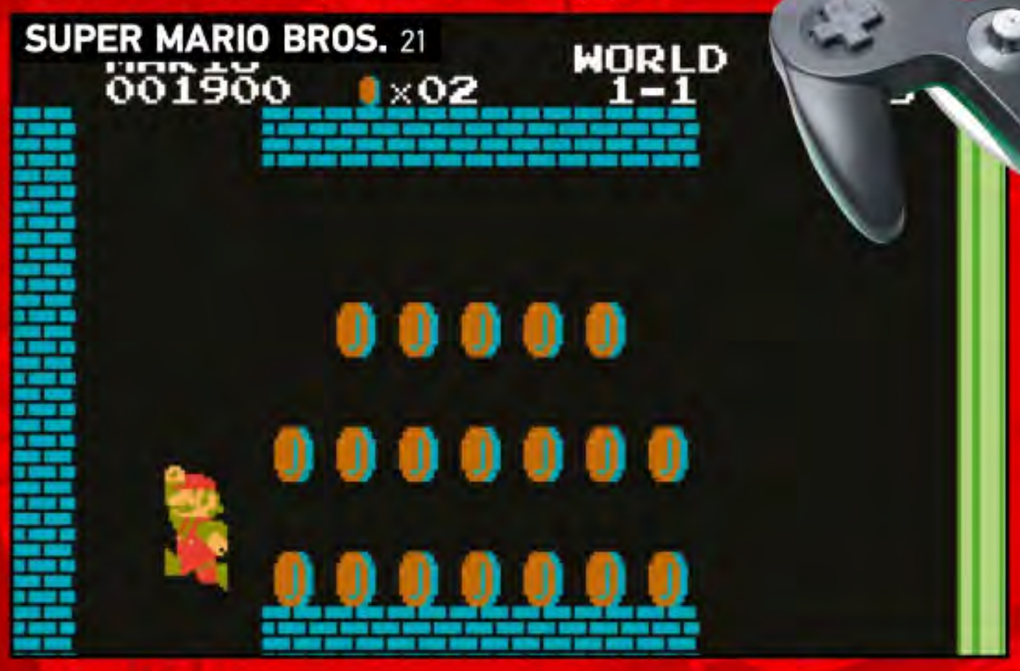
N64
16%

“The cost of games development was low and the teams small, yet each game was selling millions”
Dylan Cuthbert

and is ideally placed to explain what made the company such a magical place during this period. "Nintendo was a peak point," he says. "The cost of games development was so low and teams so small, yet each game was selling millions and at quite a high price. It helped it have a lot of freedom." Dylan also got the chance to work alongside the legend that is Miyamoto. "It was a lot of fun," he recounts. "We went to lunch with him every day for most of the development of *Star Fox*, primarily because he wanted to learn English, I think. We were quite a novelty for Nintendo at the time and probably the first group of 'gaijin' to be located there for so long." Argonaut and Nintendo arguably pushed the SNES to its limits, and today Dylan has a soft spot for the console. "It was simple, and fairly easy to do a lot of interesting things on," he smiles. "The sound chip was amazing at the time, giving games a richness that was beyond the simple sprites and colourful backgrounds." ▶

Franchise Starters

Nintendo has created some of the industry's most enduring games



The Decline

The success of the SNES was tempered slightly by the fact that Nintendo now had a powerful rival in the form of Sega, which had pushed Nintendo hard in the West. To make things more complicated, other companies were entering the arena with their own hardware. 3DO, Atari, Philips and Sony all made inroads during this time and Sega leveraged its arcade lineage to produce the 32-bit Saturn, which used CD-ROM for game distribution. Sony's PlayStation – a system born out of an earlier agreement with Nintendo which was cancelled in dramatic fashion when Nintendo decided to ditch Sony at the last minute – also utilised CDs, and was perhaps the most worrying rival for the veteran. Nintendo's new console – the Nintendo 64 – was announced around the same time but delayed until 1996, by which point both Sony and Sega had gobbled up many consumers. While its competitors switched to cheaper and higher-capacity disc-based media, Nintendo stubbornly stuck with cartridges, claiming that they avoided long load times and prevented piracy. While both of these points were true, carts were also expensive to produce and couldn't hold as much data as a disc, and many publishers turned their backs on the console as a result – notably Squaresoft, which switched development of *Final Fantasy VII* from the N64 to the PlayStation. To make matters worse, Nintendo's focus was weakened by the Virtual Boy, the company's most noteworthy hardware failure. Released in 1995, it tanked and Gunpei Yokoi apparently left the company under a cloud of shame, his legacy seemingly tarnished due to a single failure. He would be tragically killed in a traffic accident in 1997.

The N64 was host to some of the most influential videogames of the time, such as *Super Mario 64*, *GoldenEye 007* and *The Legend Of Zelda: Ocarina Of Time*, but it failed to replicate the sales performance of the NES and SNES. While former rival Sega stumbled with the Saturn and eventually bowed out of the hardware arena with the Dreamcast, Sony was unstoppable, and its PlayStation became the NES of its era. As the next console war loomed, Nintendo had to deal with the presence of yet another challenger in the form of Microsoft, which announced it was entering the games arena with its own games console, the Xbox. Nintendo's 2001 offering, the GameCube, was arguably

» Many feel that *Super Mario 64* revolutionised 3D gaming for the generation

» Shigeru Miyamoto and Takashi Tezuka have been instrumental to the success of Nintendo.

» The *Legend Of Zelda: Ocarina Of Time* highlighted the strengths of Nintendo's 64-bit console.

the one and only time that the company has bowed to industry trends and tried to produce hardware that emulated that of its rivals. Aside from using smaller discs and the odd-looking controller, the GameCube was dancing to the same tune as the PlayStation 2 and Xbox, but with three systems on the market that did the same thing, something had to give. The GameCube came in third after Sony and Microsoft's consoles, despite offering some amazing games, like *Super Mario Sunshine* and *The Legend of Zelda: The Wind Waker*.

Resurrection

Although its handheld Game Boy range remained dominant throughout the Nineties and early-Noughties, casting aside rivals such as the Sega Game Gear, Atari Lynx, Neo-Geo Pocket and Bandai WonderSwan, Nintendo was finding it hard to remain relevant in the home arena. However, its next home console would flip the industry on its head and ultimately emerge victorious in the next console war. The Wii – joined by Nintendo's already-successful handheld, the innovative dual-screen DS – established a new period of mobile gaming success for the firm. "I joined Nintendo UK the week that *Mario Kart Wii* was released," says former Nintendo UK brand manager Roger Langford. "At this point both Wii and DS platforms had already begun to take off and it was apparent from the initial sell-through of *Mario Kart* that the company was in uncharted territories." The titles Roger had to promote were indicative of the new direction Nintendo was moving in. "Like many others, I have grown up on Nintendo products and I was extremely excited to be involved with the company," he says. "I did not, however, get to work on titles such as *Zelda* and *Mario* straight away. Instead my time was focussed on many of the *Touch Generations* titles, such as *Brain Training*, *More Brain Training* and *Cooking Guide* – not what I had originally envisaged! But, to me, it was incredibly exciting, as we were marketing Nintendo product to families and to older demographics, some of which may of never even thought to play a game before. We had a product in the Wii that was accessible to the whole family and the DS had such a wide variety of titles we could appeal to the 55+ demographic as successfully as we could kids. We were very lucky to have such incredible products covering such a wide range of audiences at the time."

» *Chibi Robo* started off life on the GameCube and remains a surreal, yet delightful game.

» It didn't launch with a *Mario* game, but *Luigi's Mansion* was still fun to play on your GameCube.

» While the 3D could be gimmicky, the actual 3DS boasts some incredible games.

For Thomas, the company's ethos of marrying software with hardware really came to the fore at this point in time. "The funny thing is that this approach didn't seem prominent in the NES and SNES era, but arguably became more relevant with the N64, with iconic games like *Super Mario 64* utilising the controller and technology in amazing ways," he says. "Particularly since the Wii and DS era, this design approach of producing hardware and software in tandem has delivered some memorable, game-changing experiences. Nintendo made touch gaming popular before smartphones rose to prominence on the DS, and had millions of 'non-gamers' playing Tennis on *Wii Sports* or doing exercise with the Wii on *Wii Fit*. It ultimately benefits customers because this approach can deliver distinct, wonderful entertainment, and it benefits Nintendo as it helps the company to stand out and maintain its own identity against its rivals."

Uncertain Future

While the Wii and DS have sold in excess of 250 million units combined, Nintendo found that the market had changed by the time it launched their successors. The rise of smartphone and tablet gaming has had a marked impact on the handheld arena, and while the 3DS has managed to shift more than 50 million units globally, it is way behind the performance of the DS, which clocked up three times that figure in its lifespan. "I feel smart devices have had a huge impact," says Roger. "DS really caught fire before smartphones were around and it was the norm to see people playing out and about. When smartphones arrived the DS became redundant, as it was more convenient to play apps on phones." The Wii U, however, has been a shocking dud for the company. "Timing can be everything, and when Wii U was released technology had moved on since the launch of Wii," says ▶

Light Side

- It restored faith in consoles after the US videogame crash
- It was hands-on with third-party games, ensuring great quality.
- It popularised portable gaming with Game & Watch and the Game Boy.
- It kickstarted the trend for accessories, peripherals and hardware add-ons.
- It introduced touch and motion control to gaming.
- It showed the importance of strong mascots.
- It made retro gaming cool and accessible with its Virtual Console service.
- It never blindly rushes a game to market.

Dark Side

- It monopolised the industry during the NES era.
- It introduced region locking, a practice it supports to this day.
- It stifled innovation by taking legal action against companies like Codemasters.
- It inflicted the headache-causing Virtual Boy on us.
- It used cheap packaging for many of its games.
- It was too slow to pick up on the online revolution.
- It's a little too keen to keep re-releasing the same retro titles.
- It ignored CD-ROM tech to stick with costly carts.

Nintendo Console History

Your instant guide to Nintendo's many consoles and how much they sold

Wii 2006
101,006,000

VIRTUAL BOY 1995
770,000

Wii U 2012
10,730,000*

NINTENDO DS SERIES 2004
154,000,000

NINTENDO 64 1996
32,930,000

FAMICOM/NES 1983
61,910,000

▶ Roger. "The idea of the GamePad was and still is revolutionary, but I do not feel that a killer title ever nailed the use of it. With the Wii, *Wii Sports* was a great demo of how to use Wii and really set a positive benchmark for the system. Wii U never really had this."

Thomas feels that the Wii U is a great platform that was simply dealt a bad hand. "The more I consider the Wii U, the more I think it just got caught out by bad circumstances," he says. "I imagine at the design phase – when tablets were only just gaining popularity, the Wii was dominant – the idea of the name, GamePad and approach would have seemed right. Unfortunately the GamePad concept just wasn't exciting enough to many, and the controller also contributed to the system being too expensive. The graphical power of the console also meant that those with a PS3 or Xbox 360 won't have rated that aspect, while third-party developers of various types were starting to look at the more powerful technology of PS4 and Xbox One. It struggled to appeal to anyone beyond core fans. Nintendo systems sell at their best when they're affordable luxuries, cheaper and more creative than rivals. The Wii U was at a premium price when it launched and lacked a killer app, so only dedicated fans were willing to take a punt."

Nintendo is already looking to its next challenge. First up is a move into smartphone gaming. It's also working on its next system, recently announced as Nintendo Switch, which is a handheld system you can also connect to your TV. While many fear that Nintendo's smartphone venture could be seen as grim tidings for the veteran, Thomas has a positive outlook. "I like the fact it's taking its time with *Miitomo* – its first mobile app. All roads point to [Switch] and key releases on smartphones, and if both work together there's potential for iOS and Android to make the company a lot of money while [Switch] maintains the dedicated gaming business. Regardless of its lows, Nintendo has brand power and recognisable IPs. Those trump cards can see Nintendo make a comeback. Let's not forget times were a little tough in the GameCube era, and Wii and DS changed the whole picture – when Nintendo misreads trends it can often recapture them. I think 2016 could be hugely exciting." Can Nintendo really bounce back to greatness when the playing field has changed so much? "I seem to remember such a question being bandied about ten or so years ago and then they launched the DS and Wii," chuckles Paul. "I'd watch what they do next with great interest." ✱

*sold to date

30 YEARS OF ENTERTAINMENT

When Masayuki Uemura came to the UK earlier this year to celebrate the 30th Anniversary of the NES, we sent Paul Drury to get the inside story of Nintendo's iconic first cartridge-based console from the man who designed it

Masayuki Uemura, the NES' creator, gives his head a little shake and laughs. "I thought the NES taking off was impossible," he admits. "I think Mr. Arakawa, [first president of Nintendo Of America], never thought it would either. But in the entertainment industry, the unexpected happens. I feel so grateful people still play the NES. I can't believe I'm here!"

Professor Uemura is sitting opposite us in the conference room of the National Videogame Arcade in Nottingham, speaking through his affable interpreter Akinori 'Aki' Nakamura. He has been invited by the NVA to give a talk about the creation of the Famicom, renamed the Nintendo Entertainment System or NES for its Western release, and seems genuinely surprised with the love that the console still generates three decades after it made it to our shores. The event has been sold out for weeks because though in the UK the NES itself never sold in the huge numbers it did in America, we all know what came next. Its worldwide success – 62 million units shifted puts it in the top ten of bestselling consoles of all time – led to the SNES, N64 and the Wii and first introduced us to such perennial favourites as *The Legend Of Zelda*, *Final Fantasy* and, of course, the all-conquering *Super Mario Bros.*. The NES truly announced Nintendo's arrival in the console business.

Retro Gamer has been granted a meeting with the man behind Nintendo's first cartridge-based machine before his talk later in the evening. Uemura and Aki, both dressed in smart suits, bow politely and offer us their business cards. We nod awkwardly and in lieu of a calling card of our own, we present them with some locally brewed ale, which elicits slightly bemused but appreciative smiles. The mood suitably lightened, Uemura explains that just like Ralph Baer, the father of the home ▶

© Matt Taylor

» Masayuki Uemura is the man who designed the Famicom/NES. He also created its 16-bit follow-up.

FROM THE retro GAMER ARCHIVES

Official retro GAMER™ Seal of Quality

SPOT THE DIFFERENCE

The many faces of Uemura's 8-bit console

FAMICOM

■ The distinctive colour scheme of the Famicom was taken from Nintendo President Yamauchi's scarf, though Uemura says they never quite got the shade right.

■ The controllers were wired into the console to save on production costs and could be clipped into place on either side of the machine.

■ The second controller had a built-in microphone which could be used as an input device, an idea clearly ahead of its time.

NES

■ The front-loading system was designed to make the machine look like a video recorder rather than a games console.

■ The restyled controllers adopted the colour scheme and more angular look of the NES and could now be plugged in and out.

■ Cartridges were shielded once inserted to discourage children with wandering fingers getting an electric shock.

TOP LOADER

■ The remodelled NES-101 came out in 1993 as a cheap 'entry level' console and allowed cartridges to be inserted from above, hence its nickname.

■ The rounded controllers clearly used the same template as the SNES and were considerably more comfortable in the hand.

■ Its smaller size and sleeker appearance is something of a nod to design of the original Famicom, though grey still prevails.

console, his background was in television technology rather than games.

"I went to Sharp as an employee before Nintendo because I wanted to develop TV hardware," he says. "The fact I knew a lot about the hardware of a TV really helped when developing videogames. TV engineering is a good background for console development!"

Of course Nintendo itself was not yet involved in the emerging world of videogames when he joined in the early Seventies. The company had a long history of producing Hanafuda cards, something Uemura credits with instilling an obsession with the quality of Nintendo's output. These playing cards were used amongst the gambling fraternity and if your product was shoddy, you risked the ire of some potentially unsavoury types. "And you could play a lot of different games with them," he adds, "like a videogame console."

The famous 'Nintendo Seal Of Quality' may indeed have its origins in the ancient cards which the business had been built upon, though by the early Seventies the company was starting to experiment with electronic toys. One of the first projects Uemura was involved with was a lightgun game and Nintendo had some success in the public arena with its Laser Clay Shooting System and *Wild Gunman*, the latter game combining this lightgun technology with a full motion videos of revolver-toting cowboys.

In the home market, 1974 saw Nintendo secure the rights to distribute the original games console, the Magnavox Odyssey, in Japan and so it was no surprise when it began releasing its own standalone TV games, which offered various flavours of *Pong* and sold in their millions in the latter half of the decade. Nintendo even produced dedicated machines such as *Breakout* clone *Block Breaker* and *Racing 112*, a generic driving game with its own steering wheel attached to the console but Uemura remembers the arrival of the all-conquering *Space Invaders* in 1978 made the company refocus on its arcade business. After a few moderate successes such as *Space Firebird* and *Space Fever* and a notable failure in *Radar Scope*, a coin-op shooter he worked on which left American arcade gamers distinctly unimpressed, Nintendo tried a different

» *Duck Hunt* made great use of the Zapper that came with the NES and it still plays well today.

» *Super Mario Bros.* was an important release for Nintendo and massively boosted sales of the system.

» Uemura has been travelling the world talking about his famous console. He remains staggered by its incredble success.

approach. Repurposing the 'fire' button as a 'jump' function, *Donkey Kong* was a huge hit in 1981 and had a profound effect not just on Nintendo's fortunes in the coin-op world, but in its console ambitions too.

"We licensed *Donkey Kong* to Coleco for their home console and of course we needed to evaluate it," smiles Uemura. "Coleco was a toy company, like Nintendo, so we had a long history of looking at what they were doing, not just with videogames. We looked at the specifications of their hardware and what they'd done with our licensed product. They had done a very good version of *Donkey Kong*, [quite] like the arcade game. That was a surprise! It made us feel confident..."

The commendable version of *Donkey Kong* that appeared on the ColecoVision not only became the 'killer app' for that console, it suggested to Nintendo the commercial viability of producing its own machine. Uemura, who at this stage was heading up the videogame division, certainly saw the potential of a cartridge-based system and, as early as 1981, began work on designs for what would become the Famicom, though not everyone shared his optimism.

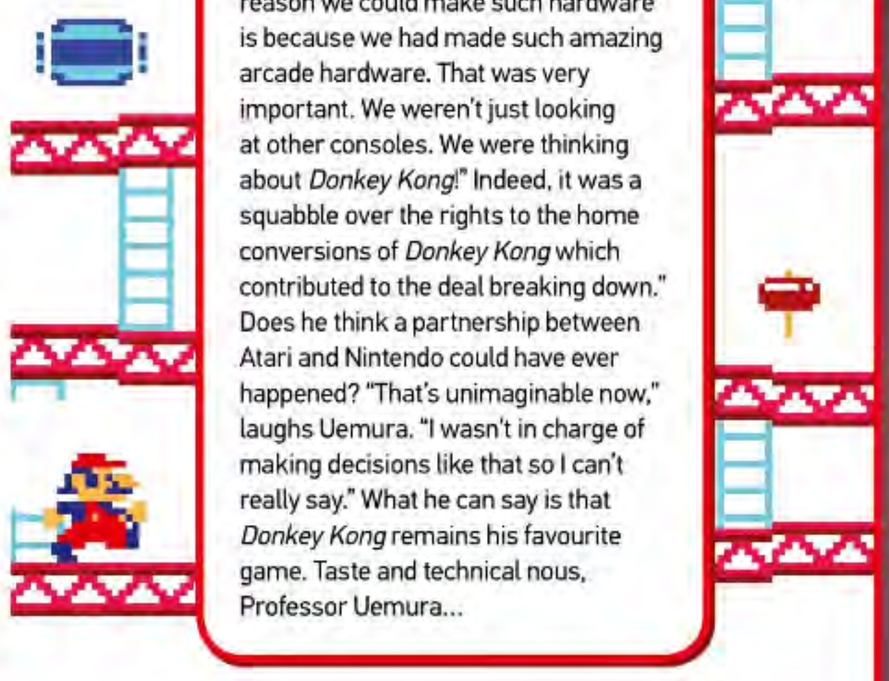
"Back then at Nintendo, no one was imagining we'd make a console with interchangeable cartridges because Game & Watch was huge," he says. "Everyone thought that was the kind of product we'd make in the future. All the engineers I had were dispatched over to that division to help them out. I couldn't do the work I wanted to do because of that."

The huge success of Nintendo's handheld series, particularly at the beginning of the Eighties when titles like *Turtle Bridge* and *Snoopy Tennis* sold over a million units, may have hindered progress on his console plans in the short term, but it gave Uemura valuable thinking space. "Because of the lack of personnel [in my division], I couldn't work, which meant I could talk to a lot of people outside of the company to find out what was going on. Of course, I talked to Atari. I could get a lot of information about console games. This research time was very precious if you think about it. I could come up with a specific idea of what I wanted to do."

Uemura leans back in his chair and starts to explain the thought processes which would determine the internal workings of his console. He wanted a CPU small enough to allow a sound chip to be integrated onto the board, thus keeping costs down, and Nintendo had a relationship with chip manufacturer Ricoh, whose 6502 processor would fit the bill. "But it was a huge problem within the company because *Donkey Kong* was made with a Z80," sighs Uemura, "so using a 6502, we couldn't use the source code. It was like throwing away a precious resource! I decided to do it anyway as chief engineer. Others said I could only do that because I wasn't programming it myself! It did mean we had to do *Donkey Kong* from scratch..."

At least Uemura considered the needs of those poor programmers tasked with converting the game to a new processor by consulting colleague Shigeru Miyamoto, the man behind *Donkey Kong*, when determining the colour palette of the Famicom. "He knew which colours would be needed to recreate his games," says Uemura, "and he would tell me how many colours the console would need [to display]. I would ask and he would answer. That was how we worked!"

With some key hardware decisions made, Uemura and Nintendo also settled on cartridges as the storage medium for the console. "We had decided its sole function was to play videogames. If it's dedicated to that, we won't need to alter data, so we chose ROM over RAM but then in 1983, the USA had a big videogame shake-up with Atari. The media thought a games-only console was out of date. There was a buzz about home computers and Apple was getting big, too. I was afraid we wouldn't get media attention so I ▶



KONG STORY

If you've read David Sheff's excellent history of Nintendo, *Game Over*, you'll be aware that Nintendo initially approached Atari about distributing its console in the United States, and Uemura was one of the people tasked with showing Atari its work in progress. "They were really surprised we were making our own hardware [for a home console]," he recalls. "We had to show them the blueprint of the PCB to prove we had made it. They didn't believe it was our work! But the reason we could make such hardware is because we had made such amazing arcade hardware. That was very important. We weren't just looking at other consoles. We were thinking about *Donkey Kong*!" Indeed, it was a squabble over the rights to the home conversions of *Donkey Kong* which contributed to the deal breaking down." Does he think a partnership between Atari and Nintendo could have ever happened? "That's unimaginable now," laughs Uemura. "I wasn't in charge of making decisions like that so I can't really say." What he can say is that *Donkey Kong* remains his favourite game. Taste and technical nous, Professor Uemura...

» *Double Dragon* uses a limited number of tiles, but careful repetition provides a nice image.

» Complex multi-sprite images in some parts of *Mega Man 2* look nice, but are prone to flickering.

FRANCHISE STARTERS

The hit game series' that started on the NES

SUPER MARIO BROS.

■ Of course he had appeared in *Donkey Kong*, albeit with a different name and profession, and Mario and Luigi had already starred in an frenetic coin-op, but this is where the brothers really showed the world what they could do. *Super Mario World* may have topped our chart of your favourite games of all time but this is where it all began.

MEGA MAN

■ Rock hard – that's the man himself and the level of difficulty typical in this long-running series which debuted in 1987. The side-scrolling run-and-gun action of the original has you leaping platforms and blasting foes with a weapon handily attached to his arm. Defeating bosses rewards you with new weapons and so the carnage continues.

LEGEND OF ZELDA

■ After Mario, Link must surely be Nintendo's best-known hero and he too began his princess-saving career on the NES. The original game was a launch title for the Famicom Disk System in 1986 before appearing in cartridge form for the NES a year later and established the action adventure template for this superlative series.

CASTLEVANIA

■ Another game that first appeared on the Disk System, it arrived on cartridge for the NES in 1987 and introduced Simon Belmont, vampire hunter and whip-cracker extraordinaire, to the gaming world. The first game is a solid platformer but if you're new to the series, you may want to start with *Symphony Of The Night* on the PlayStation.

FINAL FANTASY

■ With the 15th instalment due out this year, not to mention the host of spin-off titles, this may seem the most inappropriately-named franchise in gaming history but when Hironobu Sakaguchi created the original for Square in 1987, it was reputedly his last gasp attempt to have a hit game. Its success means we've been playing them ever since.

METROID

■ The series with the most famous reveal, in both senses of the word, in videogame history, began on the Disk System in 1986. Combining exploration, combat, platforming, atmospheric aesthetics and a little brainwork too, this laid the foundations for some truly excellent episodes, particularly *Super Metroid* for the SNES.

▶ explained Family BASIC was on the way [to make the Famicom] like a home computer."

Nintendo did indeed produce a keyboard and data recorder package along with its own dialect of BASIC in 1984, allowing users to tinker with its own game creations within some fairly restrictive parameters and though it hardly turned the console into a fully-fledged home computer, it did show Nintendo was prepared to experiment with new ideas.

This is perhaps best illustrated when it came to designing the controllers for the console. We have brought along a NES pad, and we hand Uemura the grey rectangle with its distinctive D-pad and bright red buttons, asking if he was responsible for designing this iconic piece of hardware. "It was the most difficult choice I had to make," he says, cradling the controller like a beloved child. "I had designed arcade games [in the past] and they used joysticks. The engineers I was working with on the Famicom said, 'We have to use a joystick!' But there was one guy who had gone over to work on the Game & Watch [team]. He came back to our project and he brought the control unit created for the multi-screen *Donkey Kong* Game & Watch to our division. He took out the screen and connected the electronics to the Famicom and we played!"

Previous entries in the Game & Watch series had only needed buttons for left and right but *Donkey Kong* required upward movement so Mario, or Jumpman as he was known back then, could rescue his love interest. A joystick clearly wouldn't work with a folding dual-screen handheld, so the revolutionary D-pad was created and Uemura realised this would be ideal for his new console. "Naturally, we could have used a joystick but we were thinking of [the Famicom] as a toy and toys you put on the floor. Children might step on a joystick and it could hurt their feet… and break the controller! Also, when we played, *Donkey Kong* Game & Watch we found we were only looking at the top screen. With a TV screen, you only look at that, not the controller. You need that sense, just using your fingers."

Of course, it proved to be an excellent design decision and the ergonomically-sound D-pad would become the industry standard for decades to come, even today, all of the current-generation consoles use it in one way or another. Not all the innovations of the Famicom controller were to be as influential, though, at least not in the short term. Uemura took the unusual step of including a microphone in the second controller, partly inspired by Japan's enduring love affair with karaoke. Was he really considering *Singstar*-style games at the start of the Eighties, we ask?

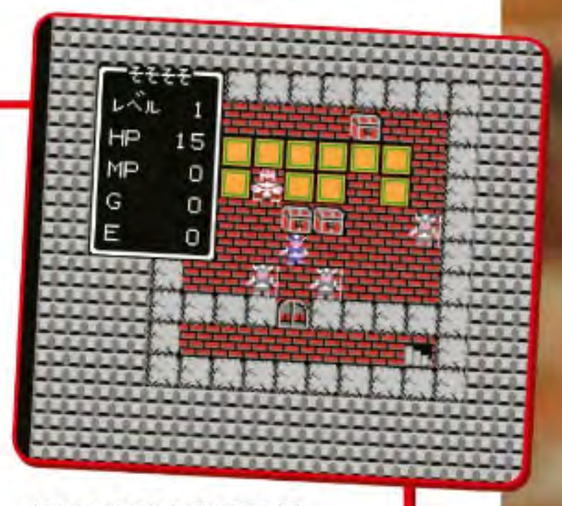
"I was thinking about it," he nods, with a twinkle in his eye. "I was also thinking about using the voice to play the role of the controller in games. I made sure the voice coming in from the microphone could be responded to by the CPU but only a few titles came out that made use of that function."

Clearly, it was an idea ahead of its time. With the Famicom project nearing completion and the core hardware taking shape nicely, there were still some cosmetic decisions to be made. It was decided that the cartridges themselves should be the same size as audio cassettes, allowing Japanese consumers to use pre-existing household furniture and containers to store their burgeoning game collection, and then there was the colour of the machine itself.

"We discussed the colour of the console a lot," remembers Uemura. "Should we make it look like a toy or more like serious hardware? In the end, President Yamauchi's favourite colour was red and so we used the same shade as his muffler."

If you're now worrying about Yamauchi's health – specifically his nose – we can assure you that we clarified exactly what Uemura meant by 'muffler' and were relieved to find he was referring to the President's scarf. Thus the aesthetically-pleasing strawberries-and-cream colour scheme of the Famicom was agreed on… except the console wasn't called that yet. The machine was not given its name until shortly before its release and Uemura explains his very personal connection with the naming process with obvious pride.

"I always talked about work stuff with my wife. She was always willing to listen. I told her the name [of the console] had not been decided and it was taking a long time to come up with a good name. There were already 'personal computers' in Japan and we were discussing that [our console]



DRAGON QUEST

■ A long-running series from Enix that started out on the NES, *Dragon Quest* (or *Dragon Warrior* as early titles were known in the West) helped popularise RPGs and establish mainstays of the genre, from turn-based combat and random encounters to controlling a party of adventurers as they battle to save the day.

BATTLETOADS

■ Though Japanese and American developers dominated the NES release schedules, the console did at least have one notable British success story. Tim and Chris Stamper established their reputation for excellence on the ZX Spectrum as Ultimate but having changed its name to Rare, began a long and fruitful relationship with Nintendo.

» *Mike Tyson's Punch-Out!!* was superb, being a slick adaptation of Nintendo's popular arcade game.

was not 'personal', it was right there for everyone, so it had to be 'family', didn't it! My wife said, 'Okay, but it has to be Famicom. You have to make it shorter!' I took that idea straight to the company, that it should be 'Famicom'. President Yaumauchi said, 'What the heck is that?!' He really didn't like it. I explained this wasn't just a 'personal computer', it was for all the family and that we Japanese tend to shorten everything and I thought it was a good name. He said, 'No, it's not a good idea to shorten [the words] at the beginning. If people want to start calling it that later, that's okay, but at the start, we needed to call it 'Family Computer.'' So that's how the name came about!"

Nintendo's Family Computer was launched in Japan in 1983 and, according to Uemura, it sold 400,000 consoles that year, a respectable number though he is quick to point out that to be considered a 'hit' you needed to shift a million units. Moreover, defects in some of the graphic chips created by Ricoh and problems with the joypads soon became apparent. The Famicom had its controllers hard-wired to the console, which was a cheaper option than providing a joypad connector but proved costly in the long run. Nintendo hadn't anticipated passionate gamers mashing and yanking their controllers so aggressively in the heat of play and a damaged joypad meant the whole

» "My role was keeping down the cost," explains Uemura. "As long as it was cheap, the engineers could do whatever they wanted."

© Matt Taylor

"I always talked about work stuff with my wife. She was always willing to listen"

Masayuki Uemura

UNDER THE HOOD

Here's a look at the key components of the NES

EXPANSION PORT

■ This expansion port was included for the possibility of any extra add-on devices for the console, such as disk drives and modems. However, none of the projects using the expansion port ever saw the light of day, so it's a vestigial connector.

PPU

■ The Picture Processing Unit was custom-built for the NES, again by Ricoh. It was a very capable piece of graphics hardware in 1983, able to display 64 sprites and up to 25 colours on the screen simultaneously from a palette of 54.

CPU

■ The Ricoh 2A03, a modified version of the popular 6502 CPU, is an 8-bit processor running at 1.79MHz. It's a close relative of the CPUs used in the Atari 8-bit range, the Commodore 64, the Apple II and the BBC Micro.

LOCKOUT

■ The 10NES lockout chip enabled Nintendo to control who had the ability to release NES games, as well as enforcing regional lockouts between North American and European consoles. It's also a cause of the infamous 'blinking light' error.

RAM

■ The biggest limitation of the NES is its limited RAM: 2KB for reserved for general usage and 2KB for graphics. Cartridges often supplemented this with their own onboard RAM, according to their needs.

CARTRIDGE SLOT

■ Using a 72-pin connector rather than the 60-pin one for Famicom cartridges, the NES cartridge port was designed to replicate a video recorder's front-loading mechanism. However, the pins can easily become bent and dirty, leading to errors.

console was unusable. "The main thing I remember from that time is the defective consoles being returned," sighs Uemura, who estimates a staggering 100,000 faulty Famicoms came back during that first year. "All these problems we had to overcome! The whole company had to get involved to resolve them. Yes, I felt pressure but it was exciting because everyone was helping us out."

The company rallied round its new venture, partly, suggests Uemura, due to increased competition in the handheld market previously dominated by Game & Watch, and by the end of 1983, its stocks of the Famicom had sold out. "I thought that was the end of it," he shrugs. "Personally, I was pessimistic but then in February 1984, distributors started asking me when we were making more! Kids were asking for it. There is a custom in Japan for grandparents to give money to children and this is what they wanted to spend it on!"

Though Uemura maintains the initial launch of the Famicom in his home nation was generally viewed as 'a failure', there was still talk of the company learning from its mistakes and revamping the console for the US market. Nintendo did, at least, have some indication that its videogames were valued across the Pacific. The Nintendo Vs. System was doing well in American arcades and Uemura recalls seeing the February 1985 edition of trade magazine *PlayMeter* showing Nintendo titles such as *Vs. Tennis* and *Vs. Pinball* dominating the charts. Nintendo were still producing games that people wanted to play but the negative image of home consoles which had followed the spectacular downfall of Atari and other key industry players was a significant barrier to overcome.

"We thought by changing the exterior of our console, we could make ourselves seem different," explains Uemura. "The front-loading system for the NES was designed to make it look like a video recorder [not a games console]. Also, the US is a dry country so we wanted to shield the cartridges… we didn't want children getting [an electric] shock!"

» Like several high-profile releases, *The Legend Of Zelda* started off life on the Famicom Disk System.

» "We didn't want the sound to be too annoying in the house, even if it was played repeatedly," says Uemura of the Famicom's audio.

There were other, more physical, concerns that influenced the redesign of the Famicom for the American market. "The hands of American children are bigger than Japanese children. We were worried they might find it hard to use the controller. Also, they didn't have D-pads but we thought this might make our console stand out from those that used joysticks."

After the problems with the controllers in Japan, Nintendo decided to make the NES controllers detachable. It also dispensed with the microphone, figuring that karaoke was not a big draw in the States, thus saving on cost and they also recognised that American homes were generally larger than their Japanese counterparts so made the leads much longer. All sensible decisions though one addition for the US launch was a little more left-field. The console was bundled with its own Robotic Operating Buddy, or R.O.B., a toy robot that linked up with the NES. "We pushed that futuristic image," says Uemura. "This was not just a videogame. This was something new!"

The team also emphasised the primary 'entertainment' function of the machine by renaming it the Nintendo Entertainment System, a title which was only decided a month before the console's launch in the United States. Besides, the 'Family Computer' tagline had been used by rival manufacturer Mattel in its advertising for its Adam computer. Nintendo also included the NES Zapper in the package, after extensive market research had returned a not altogether unexpected finding. "Americans like guns", says Uemura, with a wry smile.

The NES launched in the United States in 1985 along with 17 games, predominantly titles taken from its Vs. arcade system. Porting tried-and-tested coin-op hits to home systems was a traditional way to boost console sales and indeed the kids of America were soon to be found playing *Vs. Tennis* et al on the many demo machines that had been set up in toy stores for free, rather than spending their precious quarters in the arcade. "It was still a risk," argues Uemura. "Just because these games were popular in the arcade, it didn't necessarily mean they would be in the home. The president of Toys R Us played the NES and said, 'This will sell!', which helped a lot. We were expecting sales of the NES to be 3 million. Then *Super Mario*

© Matt Taylor

MORE FROM UEMURA

COLOUR TV GAME SYSTEM

■ Nintendo took its first tentative steps as a console manufacturer in 1977 with the Color TV-Game 6. Featuring half a dozen versions of *Pong*, it was shortly followed by TV-Game 15, which served up more bat-and-ball games and added wired controllers, making it considerably more user-friendly. If you have a white version of the original unit, you have a real rarity as, apparently, only a few hundred were ever produced.

DISK SYSTEM

■ This Japanese-only peripheral allowed a disk drive to be attached to the Famicom console via the cartridge port and used bespoke floppy disks called 'Disk Cards' which could store 112K, which was a considerable size on its release in 1986. "Based on results, the disk system wasn't a good idea," acknowledges Uemura, "but from a developers [point of] view, it was rewritable and it did reduce costs." A release in the West was mooted but never materialised.

ZAPPER (BELOW)

■ Originally resembling a revolver when released in Japan to tie-in with the cowboy-themed *Wild Gunman* game, this lightgun was remodelled for the North American market, adopting a futuristic blaster look. Initially produced in NES grey, a version came in fluorescent orange, presumably to distance itself even further from an actual firearm. Many pixelated birds succumbed to its firepower when *Duck Hunt* was bundled with the console.

SUPER FAMICOM

■ What Uemura did next. He was lead designer again on what would become one of the most beloved consoles of all time and home to some of the best games ever made. Uemura politely declined to answer any questions about his follow-up to the NES during our interview, though alluded to many intriguing tales concerning its creation. Perhaps when the SNES also reaches 30 we'll get to hear them.

» "I would like to have added larger sprites," says Uemura when asked if he'd have done anything different with his console. "Characters were only 8x8 pixels."

"Kids were calling our HQ in Seattle if they were stuck in a game or asking about secrets"

Masayuki Uemura

TO THE MAX

The games and chips that expanded the NES' capabilities

MEGA MAN 2

CHIP: **MMC1**

■ The first of Nintendo's custom memory management controller chips was used to switch between banks of program and character ROM, and it added support for important things like game saving and multi-directional scrolling. As a result, many games used it – literally hundreds of them, from both Nintendo and its third parties.

SUPER MARIO BROS. 3

CHIP: **MMC3**

■ The most popular of Nintendo's add-on chips was used in many NES games, and provided additional RAM, a pair of selectable 8KB program ROM banks, two 2KB character ROM banks and four 1KB character ROM banks. A scanline-based IRQ counter is also included to improve split-screen scrolling.

COBRA TRIANGLE

CHIP: **A0ROM**

■ Chris Stamper's memory management controller is relatively simple, offering a 32KB ROM bankswitch and character RAM, but it has an odd quirk in that it uses one-screen mirroring, meaning that only one nametable is used for all four quadrants of the screen. As you might expect, it was used in games developed by Rare.

AKUMAJOU DENSETSU

CHIP: **VRC6**

■ As well as offering bank-switching for both program and character ROM and a CPU cycle-based IRQ counter, this advanced chip added three additional sound channels. In the US and Europe, *Castlevania III* used Nintendo's MMC5 chip instead, as the NES can't utilise extra sound channels like the Famicom.

GIMMICK!

CHIP: **SUNSOFT 5B**

■ Sunsoft's FME-7 controller allowed for program ROM to be switched in 8KB banks and character ROM in 1KB banks, and contained a CPU cycle-based IRQ. However, the upgraded Sunsoft 5B version used in *Gimmick!* also included a version of the Yamaha YM2149, adding extra sound channels that set the game apart from its peers.

» *Metroid* was one of several NES games that featured a Password Pak, after starting off life on the Disk System.

Bros. came out about the same time as it entered America. The rest is history."

New hardware needs a 'killer app', a piece of software that captures the public imagination and makes consumers snap up a machine. *Super Mario Bros.* must rank as one of the best examples of this, becoming the biggest-selling title in videogaming history at the time and igniting America's love affair with all things Mario. There was a real buzz about this new console from the East and Uemura remembers tales of phones ringing off the hook at Nintendo Of America. "Kids were calling our HQ in Seattle if they were stuck in a game or asking about secrets. Our employees couldn't work effectively! We had letters from parents, too. I remember getting some that were really unhappy we hadn't included Stage 2 [the pie factory] in the NES version of *Donkey Kong*. We had to say sorry, it wasn't possible, but it made me realise parents were really evaluating the NES."

So despite the initial predictions from experts that Nintendo was foolhardy releasing a console after the so-called videogames crash of the mid-Eighties, the NES ended up dominating the American and Japanese markets for the rest of the decade, ably filling the gap left by Atari's fall from grace. Was timing a key factor in the colossal success of the console, we ask?

"You understand the meaning of the word 'Nintendo'?", Uemura replies. "Leave luck to heaven," we answer. He looks us right in the eyes and chuckles, "Well, there you are."

As our time with Uemura draws to an end, an orderly queue forms of National Videogame Arcade staff politely asking if he might autograph various bits of NES hardware. We dutifully join the line along with our photographer Matt, who clutches a boxed console in mint condition. Neither of us owned the machine back in the day but, as with so many Europeans, we have come to love it in retrospect. As Uemura gets busy with a magic marker, we ask him how important it was to him that his console was embraced not just in his native Japan but across the globe?

"From a management perspective, of course we want to sell to everybody in the world," he says, after a long pause, "but it's not about that from an engineer's perspective. It's about whether the hardware they produce will be loved and esteemed by everyone. That's what we struggle to do. Personally, I thought it was great hardware but I didn't think it would be accepted [in the way it was]. And remember, the people that made the games did not grow up playing videogames. Creating something in their minds and interacting with it on a TV screen was really exciting for them. That excitement was passed on from the developer to the player at home. Hardware can allow you to go beyond your imagination. Like [James] Watt invented the steam engine and it set other people's imagination free..."

It's a powerful point and Uemura's answer gives us the required confidence to ask him one final question. What role does he think videogames have played in fostering an understanding and collaboration between the nations of East and West? A gentle smile spreads across Uemura's face.

"Childhood is universal," he says. "We are different cultures but we share that universal sense of childhood. To children, it didn't matter if this software was coming from the East or the West. Kids loved Mario and parents

loved [the NES] because their kids loved it. Children will be excited by similar things despite cultural diversity. I'm teaching at the university in Kyoto right now and [the word] 'jump' is used in Japan, taken straight from English. Kids, anywhere in the world, want to jump! We could integrate that into videogames. It's about play. The NES also had an important role in transmitting Japanese culture to the world and we received influences from the rest of the world. If America hadn't invented consoles, we wouldn't have the NES!"

The Nintendo Entertainment System as a symbol of peace and understanding may be pushing it slightly but it undoubtedly makes us look at the unassuming grey breeze block in a different light. As we shake hands with Uemura and Aki and say our goodbyes, fellow journalist Gemma asks its creator what the console symbolises to him?

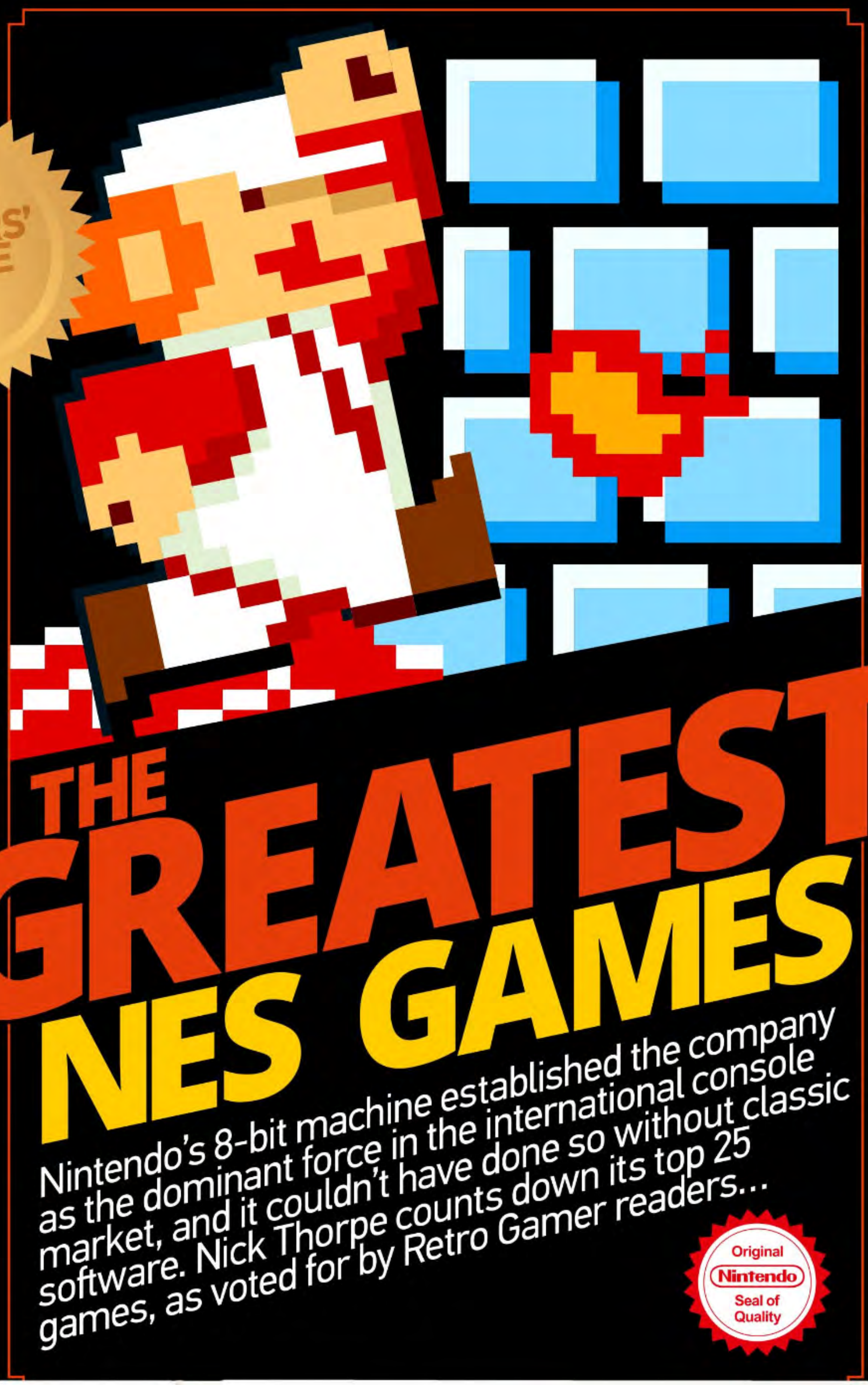
"It's the device that changed my life," he laughs. "It made it go crazy! After all these years, I'm still talking about it, coming here, all over the world."

Thirty years from its UK release and the NES is still bringing people together. ✱

» Before the Wii, the NES was Nintendo's most successful system, with over 60 million units sold.

Many thanks to the National Videogame Arcade, Uemura's translator, Aki, Gemma at juicygamereviews.com and Matt Taylor at bit.ly/1SVZX3t for the photography.

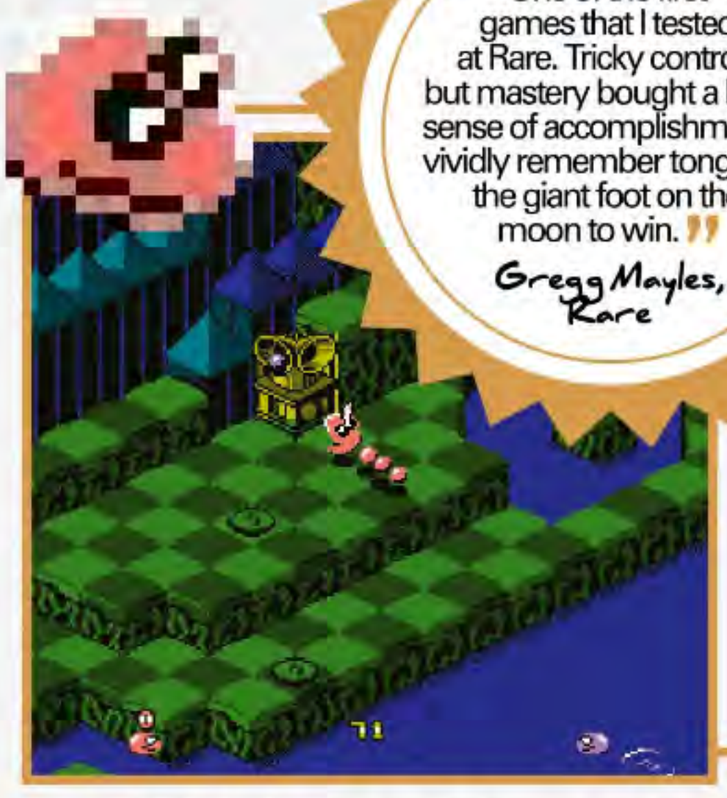
retro GAMER READERS' CHOICE



THE GREATEST NES GAMES

Nintendo's 8-bit machine established the company as the dominant force in the international console market, and it couldn't have done so without classic software. Nick Thorpe counts down its top 25 games, as voted for by Retro Gamer readers...

Original Nintendo Seal of Quality



> One of the first games that I tested at Rare. Tricky controls but mastery bought a huge sense of accomplishment. I vividly remember tonguing the giant foot on the moon to win.
>
> Gregg Mayles, Rare

SNAKE RATTLE 'N' ROLL

DEVELOPER: Rare **YEAR:** 1990 **GENRE:** Platform

25 **Born from an** experimental drive to create a small NES cartridge, *Snake Rattle 'N' Roll* sees players chasing down and eating Nibbley Pibbleys in order to grow their snake, in order to tip the level's scales and open the door to the next stage. Rare's isometric action game is a tricky one to categorise – but that's not a bad thing, as it's a unique experience. Be sure to try the simultaneous two-player mode, too!

BUCKY O'HARE

DEVELOPER: Konami

YEAR: 1992 **GENRE:** Platform

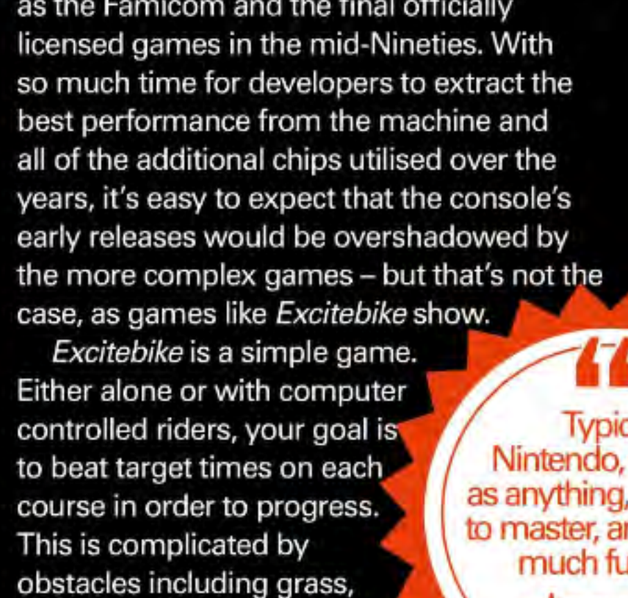
24 **The spotlight might** not have shone on *Bucky O'Hare* for long, but Konami ensured that he got a very good licensed platform game while it did. It's similar to *Mega Man* in structure, with Bucky seeking to rescue his crew members from the Toad Empire across a variety of planets, which can be tackled in any order. Arriving late in the life of the NES, *Bucky O'Hare* provided some of the most attractive visuals on the system alongside some pretty strong gameplay.

CHIP 'N DALE: RESCUE RANGERS

DEVELOPER: Capcom **YEAR:** 1990

GENRE: Platform

23 **While Capcom is** best known for *Street Fighter* and *Resident Evil* today, the NES era saw the company make a name for itself based on a range of high quality platform games. The gameplay is good here, but it's striking how few cartoon licences capture the look and feel of their source material as well as *Chip 'N Dale,* the game boasts detailed sprites and colourful backgrounds which emphasise the size of our heroes.



EXCITEBIKE

DEVELOPER: Nintendo R&D1

YEAR: 1984 **GENRE:** Racing

22 **One of the** interesting things about the NES is that the machine had a very long shelf life, with over a decade between its Japanese release as the Famicom and the final officially licensed games in the mid-Nineties. With so much time for developers to extract the best performance from the machine and all of the additional chips utilised over the years, it's easy to expect that the console's early releases would be overshadowed by the more complex games – but that's not the case, as games like *Excitebike* show.

Excitebike is a simple game. Either alone or with computer controlled riders, your goal is to beat target times on each course in order to progress. This is complicated by obstacles including grass, mud patches, barriers, and the ever-present ramps, which require players to correct their landing angle as they fall – a simple challenge, but one which remains challenging to consistently perform over a long period. Falling off your bike will cost you valuable time, as will overheating the bike by overusing the high speed button. As the game goes on, the courses become more complex, with high angle ramps and fewer clear stretches on the track.

> Typical Nintendo, simple as anything, but hard to master, and it is so much fun.
>
> adippm82

The main thing that set *Excitebike* apart from other NES games was the inclusion of a level editor. While the option to save and load these creations was never available to the West as it required the Japan-only Famicom Data Recorder add-on, the mode extended the game's life considerably once they'd exhausted all of the pre-designed stages. While *Excitebike* might not have been the flashiest game in many players' NES collections, the combination of this mode and the compelling gameplay meant that it was often revisited.

> Great challenge and once you get used to it, a great platformer. No wonder we begged for a sequel for 25 years…
> ALK

KID ICARUS

■ **DEVELOPER:** Nintendo R&D1 ■ **YEAR:** 1986 ■ **GENRE:** Platform

21 **Right from the** start, *Kid Icarus* is a game that just *feels* different from its platforming contemporaries. In other games you'll typically traverse a stage from left to right, but *Kid Icarus* starts you off by sending you on a skyward journey, with a playfield that wraps horizontally across the screen – when Pit walks off the right edge, he'll appear on the left. It's a feeling of difference that permeates the game, as while the game offers items and upgrades, it never crosses over into RPG territory. For many years this was one of Nintendo's forgotten properties, with only a Game Boy sequel to continue its lineage, until Pit's adventures were continued in the shooter *Kid Icarus: Uprising* on the Nintendo 3DS.

DOUBLE DRAGON

■ **DEVELOPER:** Technos ■ **YEAR:** 1988 ■ **GENRE:** Beat-'em-up

19 **The hit beat-'em-up** came to the NES, but rescuing Marian from the clutches of Machine Gun Willy wasn't quite the same proposition as in the arcades. For a start, the simultaneous two-player mode is nowhere to be found, and enemy numbers are limited. Further, stages received some interesting redesigns and all but the most basic fighting moves were gained through an experience system. Despite these changes, *Double Dragon* remained a compelling and challenging beat-'em-up that retained enough of the arcade essence to be truly worthy of the name. Multiplayer fans can also check out Mode B, which features larger character sprites in one-on-one battles and it even allows players to control enemy characters – an interesting novelty, to say the least.

RIVER CITY RANSOM / STREET GANGS

■ **DEVELOPER:** Technos

■ **YEAR:** 1989 ■ **GENRE:** Beat-'em-up

20 **Following arcade success** with games such as *Renegade* and *Double Dragon*, beat-'em-up innovators Technos returned with a NES title that took the genre in a more console-focused direction. As well as beating up all manner of weirdly-named gangs like The Squids and The Generic Dudes, players can learn moves, develop stats, and even buy items. *River City Ransom* wasn't a huge success when it arrived in North America and it didn't fare a great deal better when it was released in Europe as *Street Gangs*, but the game's reputation has grown, thanks to a loyal cult following, earning its place in your top 25.

CASTLEVANIA III: DRACULA'S CURSE

■ **DEVELOPER:** Konami ■ **YEAR:** 1989 ■ **GENRE:** Platform

18 **We must admit** to being surprised, here – we were expecting this brilliant platformer to appear much higher in your ranking. The last of the major *Castlevania* games to appear on the NES was a prequel to the events of the first game, starring Simon Belmont's ancestor, Trevor Belmont, as he attempted to defeat Europe's most notorious vampire.

The game left the RPG elements of *Castlevania II: Simon's Quest* and returned to the platform action template of the original game. However, new improvements included a non-linear level structure, additional playable characters with their own unique abilities (including *Symphony Of The Night* star, Alucard) and a more challenging second quest for players that have finished the game. In part thanks to the use of the expensive MMC5 chip, *Castlevania III* boasts some of the most impressive visuals on the system, and the action is accompanied by an excellent soundtrack.

FAXANADU

■ **DEVELOPER:** Hudson Soft ■ **YEAR:** 1987 ■ **GENRE:** Action-RPG

16 **We hear your** cries, dear readers! *Faxanadu* is a game that you've highlighted as being something of a forgotten gem, and its appearance in the top 25 is testament to your strength of feeling on this matter. The player is cast as a wanderer who returns to his home town only to find it in a state of severe decline, and being attacked by dwarves. The high fantasy setting is aided by the fact that *Faxanadu* doesn't utilise the cartoonish look that many NES games adopted, giving it a more mature impression.

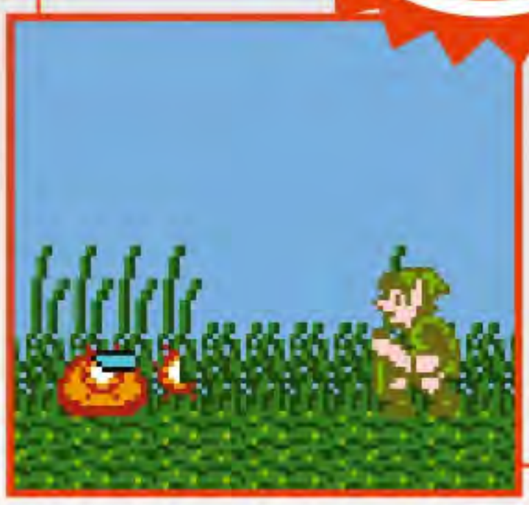
The game itself is a side-scrolling action-RPG of the kind that will be familiar to players of games such as *Zelda II* and *Wonder Boy III: The Dragon's Trap*. *Faxanadu* includes many of the key trappings of the RPG genre, with a protagonist whose capabilities grow with experience, a wide range of non-player characters to chat to, and full inventory options, but combat and exploration are handled in a traditional platform game fashion. Give it a go if you haven't yet played it – with prices hovering around £10, it won't break the bank and you wont regret it.

ZELDA II: THE ADVENTURE OF LINK

■ **DEVELOPER:** Nintendo R&D4 ■ **YEAR:** 1987 ■ **GENRE:** Action-RPG

17 **Despite huge sales** of over 4 million copies, the first *Zelda* sequel hasn't always received a huge amount of love over the years. However, lots of you hold the opinion that it is unfairly maligned and we're inclined to agree. *Link's Adventure* retained the first game's top-down viewpoint for overworld exploration, but the meat of the gameplay was found in side-scrolling combat sections. Additional RPG elements were also introduced in *Zelda II*, including experience levels, a magic system and more extensive interaction with the non-player characters you found in towns.

> "I know people think it's the black sheep of the *Zelda* series, but it should be given a chance 'cos it's a great game."
> SpockIOM



Players have come down hard on *Zelda II* for departing so heavily from the gameplay of the original title, and future 2D *Zelda* games stuck much more closely to the top-down action of the first game. However, it highlights Nintendo's willingness to experiment as a game developer – a commendable quality, even if it doesn't always guarantee popular results.

DUCKTALES

DEVELOPER: Capcom
YEAR: 1989 **GENRE:** Platform

15 **Capcom offered an** excellent choice of licensed Disney platformers on the NES, and you guys liked *DuckTales* the most. We love Scrooge McDuck hopping around on his cane, and the structure which requires you to obtain items in various stages to progress is very cool.

KIRBY'S ADVENTURE

DEVELOPER: HAL Laboratory
YEAR: 1993 **GENRE:** Platform

14 **Players that kept** their NES hardware deep into the 16-bit era were rewarded with this incredible platformer. It wasn't the hardest game to complete, but the ability to copy enemy attacks offered a twist on the platform genre which ensured that we remained interested throughout.

SUPER MARIO BROS. 2

DEVELOPER: Nintendo R&D4
YEAR: 1988 **GENRE:** Platform

13 **While this *Mario*** game wasn't always a *Mario* game and feels slightly different as a result of that, the fact remains that it's still an excellently designed platformer. Being able to control Peach and Toad was very cool, and Luigi became distinct from his brother with his floaty jumps.

RC PRO-AM

DEVELOPER: Rare
YEAR: 1987 **GENRE:** Racing

12 **This racer** is one of Rare's earliest hits on a Nintendo platform, and features radio-controlled cars battling to take victory across 24 tracks. We mean it when we say battling, too – these little cars pack some firepower, with bombs and missiles available to take out rivals.

MIKE TYSON'S PUNCH-OUT!!

DEVELOPER: Nintendo R&D3
YEAR: 1987 **GENRE:** Fighting

11 **Taking the action** of Nintendo's arcade boxing series and taking it to the home consoles, *Punch-Out!!* knocked players out with memorable characters and compelling mechanics. Best of all, Tyson himself put in an appearance.

TEENAGE MUTANT NINJA TURTLES

DEVELOPER: Konami **YEAR:** 1989 **GENRE:** Platform

10 **If there was** one thing that kids couldn't get enough of in the late Eighties and early Nineties, it was this quartet of pizza-loving crime fighters, and Konami sensibly snapped up the videogame rights early. The result was a brilliant, strong platformer, although one which had the incredible ability to frustrate players – in particular, the infamous underwater bomb disarming stage is one of the most frustrating levels in any videogame ever.

While the game was popular internationally, UK-based Nintendo fans have a particular fondness for the game as its placement in a NES bundle over Christmas 1990 meant that it was the first game many players owned. The presence of the Turtles drove up desire for the NES, and even helped it briefly overtake Master System sales in the UK.

> "The game that made me want a NES. I remember recording the ad for the Turtles box set and watching it every day."
> RodimusPrime

DUCK HUNT

DEVELOPER: Nintendo R&D1
YEAR: 1984 **GENRE:** Lightgun Shoot-'em-up

9 **Packed in with** all but the basic NES console bundles, *Duck Hunt* was a cornerstone of many gamers' NES experiences and was the only Zapper title to make your top 25 list. What makes *Duck Hunt* so memorable is its simple yet captivating gameplay – one or two ducks fly out and you need to shoot them down, ideally with as few misses as possible. There's also the clay pigeon game in Mode C, in which discs fly into the distance.

But let's be honest, it's all about bagging birds – and of course that pesky dog. He certainly adds character, proudly displaying your hits when you make them and mocking you when you fail to do so. Our canine companion's sniggering definitely triggers some of our more violent urges, but try as we might, we can never take out our frustrations on him by just blasting him away. That is true sadness, there.

> "This is a great little game, introducing many a fresh keen-eyed marksman to the joys of the lightgun."
> Jim Bagley, SpecialFX

METROID

■ **DEVELOPER:** Nintendo ■ **YEAR:** 1986 ■ **GENRE:** Platform

7 **At its heart,** *Metroid* is a simple game – a platform-shooter in which Samus Aran seeks to recapture the dangerous Metroid organisms, set on the planet Zebes. However, it introduced many players to a new style of platform game, in which exploration was key and new abilities enabled access to additional areas. This template is so closely associated with *Metroid* that it co-named the Metroidvania subgenre, along with the *Castlevania* series which later adopted this style.

While the action is all well and good, *Metroid*'s best bits are the memorable twists which stick in the memory long after you've beaten the game. The revelation that Samus Aran is a female protagonist might have lost its shock factor, but its importance remains. As for the other twist – well, don't put your pad down after Mother Brain has been defeated…

BATMAN

■ **DEVELOPER:** Sunsoft ■ **YEAR:** 1989 ■ **GENRE:** Platform

8 **The caped crusader** has had a number of videogame incarnations over the years, but few have accompanied a peak interest in Batman like this one, which followed in the wake of the 1989 film starring Michael Keaton. The videogame was themed after the film and took the form of a platformer which allowed you to fight the likes of Killer Moth, Firebug and, of course, the Joker as you sought to clean up Gotham. The game has since achieved recognition on its own terms, with one company even releasing an action figure in NES colours.

While Batman's weaponry was present, one of the coolest features in *Batman* was actually the ability to leap off walls with a secondary jump. Rarely seen at the time, this feature enabled our hero to ascend through narrow vertical passages and save himself from otherwise fatal situations.

CASTLEVANIA

■ **DEVELOPER:** Konami ■ **YEAR:** 1986 ■ **GENRE:** Platform

6 **Konami's developers rarely** seemed more at home than when they were working on the NES, coming up with hits such as *Castlevania*. Borrowing some thematic cues from Capcom's *Ghosts 'n Goblins*, the game casts you as Simon Belmont, a vampire hunter out to kill Dracula. Each stage pits you against all manner of supernatural villains, but is well-designed to fit the crumbling castle theme and offers strong level design. The game is visually strong and offers memorable tunes, while tight control enables precise platforming and offers the use of secondary weapons such as axes and crucifixes, rounding off an excellent package.

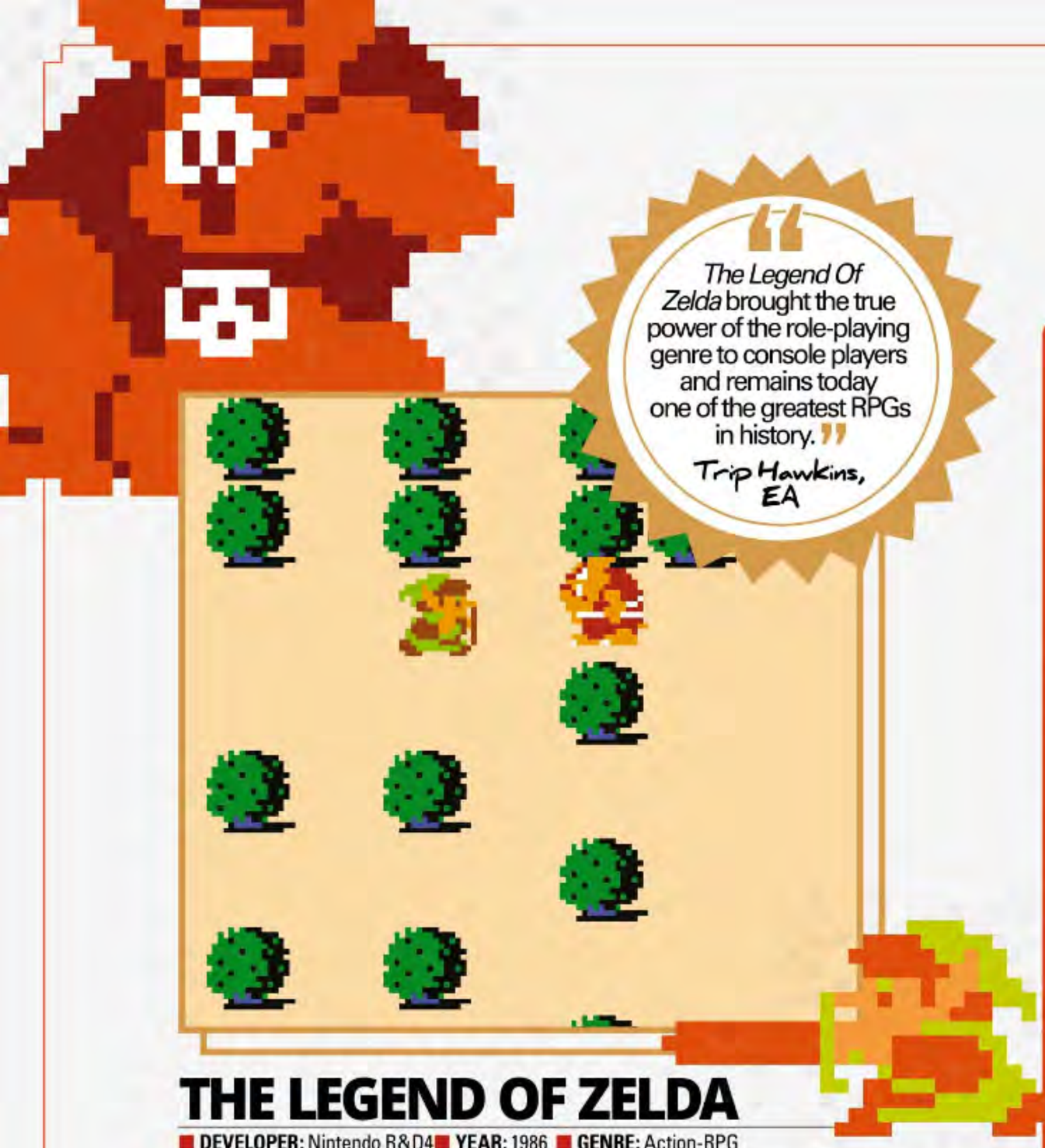
> "Me and my brother would play it and we'd be like 'who's going to be Arnie, who's going to be Stallone?'"
>
> Claudio Sanchez, Coheed and Cambria

CONTRA / PROBOTECTOR

■ **DEVELOPER:** KONAMI
■ **YEAR:** 1988 ■ **GENRE:** Run-and-gun

5 **This classic run-and-gun** is your favourite arcade conversion for the NES. *Contra* is a great example of Konami at the height of its powers. While the NES version of *Contra* makes a few changes from the coin-op, the game still offers the key things that make it so appealing: frantic action and a very stiff challenge. Though the game was renamed for Europe and censored in order to circumvent German censorship laws, the gameplay shone through.

> "The controls and gameplay are spot on. Just the right side of difficult and never unfair."
>
> theantmeister



> "*The Legend Of Zelda* brought the true power of the role-playing genre to console players and remains today one of the greatest RPGs in history."
>
> Trip Hawkins, EA

THE LEGEND OF ZELDA

■ **DEVELOPER:** Nintendo R&D4 ■ **YEAR:** 1986 ■ **GENRE:** Action-RPG

4 **From the second** you start Link's first adventure and set off towards the cave, the game starts sinking its hooks into you with the most lo-fi rendition of the now-familiar theme music – and just as later *Zelda* games can trace their elaborate scores back to Koji Kondo's chip music, they can do the same with their game design. The original *Legend Of Zelda* exemplifies the excellence of the core *Zelda* formula – a mixture of exploration, puzzles, and combat that draws you into the game until you're determined to see it through to the end. Plus, who doesn't love those beautiful gold cartridges?

> "Nigh on perfect controls, great weaponry and a very fair difficulty make this the stand out title for the NES."
>
> ArchaicKoala

MEGA MAN 2

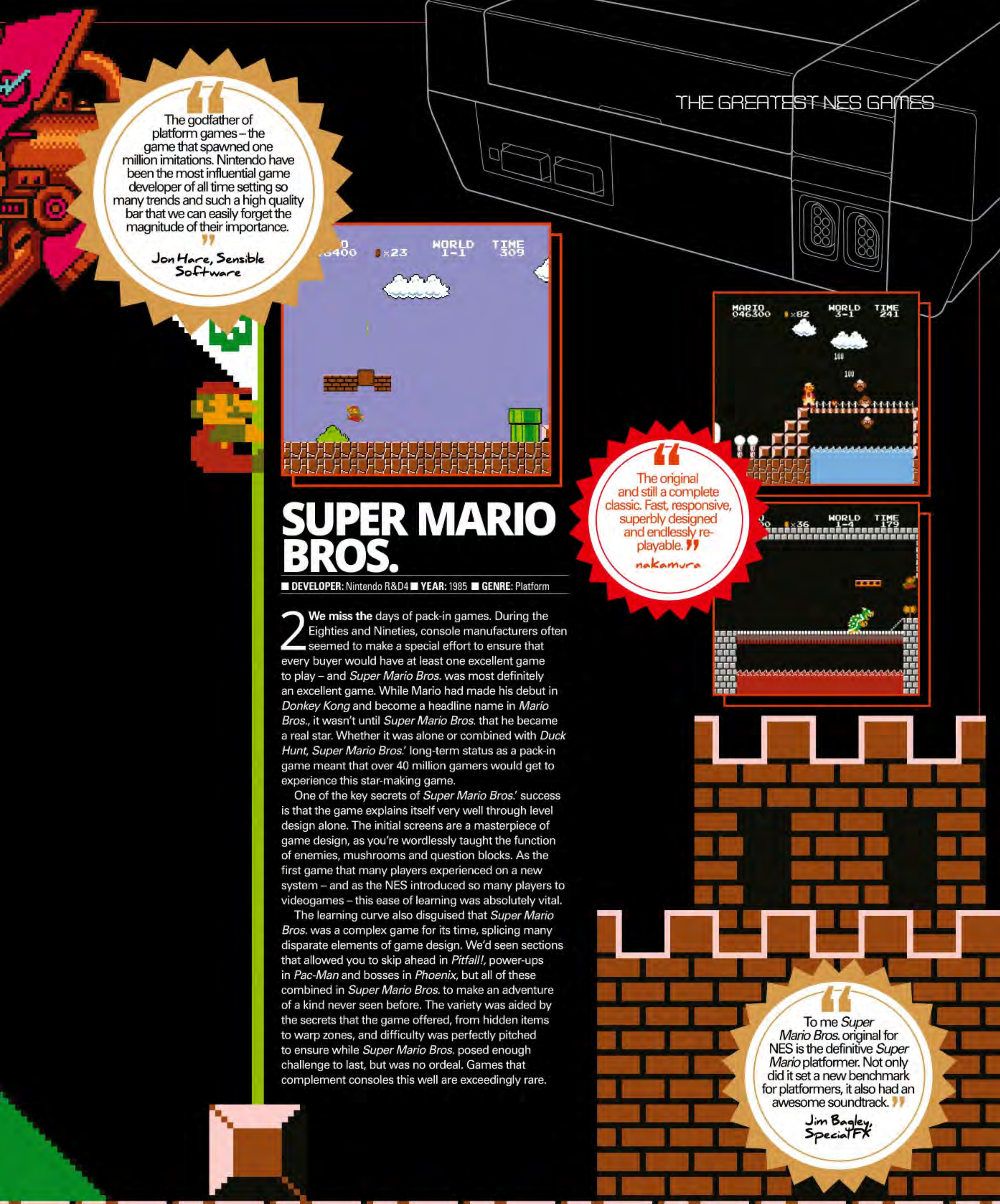
■ **DEVELOPER:** Capcom
■ **YEAR:** 1988 ■ **GENRE:** Platform

3 **After almost three** decades of *Mega Man* games, it's easy to forget that the first one was not a tremendous financial success for Capcom. As a result, the company didn't give the green light for a sequel immediately – the development team was permitted to work on *Mega Man 2*, but was also required to work on other projects simultaneously. As a result, it was common for staff to work very long hours making the game, often staying in the office well past their regular working hours. *Mega Man 2* was a real labour of love.

For teams developing sequels, it can be tricky to work out what is broken and in need of fixing, and what is better left alone. Capcom trod that fine line carefully and reaped the rewards. Elements that were preserved from the original game include its platform-shooter set up and its non-linear structure, in which a player chooses a stage based on which Robot Master they'd like to take down. As before, once you've downed a boss you'll gain access to their weapon, some of which are more effective than others.

However, it's the improvements which make *Mega Man 2* the best of its series. Not only is it superior to its predecessor, the brutal difficulty level of the first game has been toned down. The game is still no pushover, but its challenge is more likely to cause fun than frustration – which is a good job since the game has eight Robot Masters, up from six in the first game. *Mega Man 2* went on to sales success and established the blue bomber as a star, a richly deserved outcome for one of the best NES games ever.

> "Anytime I'm feeling frustrated or depressed, or I'm lamenting the industry, all I have to do is load up *Mega Man 2*. I revert to being eight again, and I can't help but be happy, and smile."
>
> Jaime Griesemer, ex-Bungie, Halo 3 lead designer



> The godfather of platform games – the game that spawned one million imitations. Nintendo have been the most influential game developer of all time setting so many trends and such a high quality bar that we can easily forget the magnitude of their importance.
>
> Jon Hare, Sensible Software

> The original and still a complete classic. Fast, responsive, superbly designed and endlessly re-playable.
>
> nakamura

SUPER MARIO BROS.

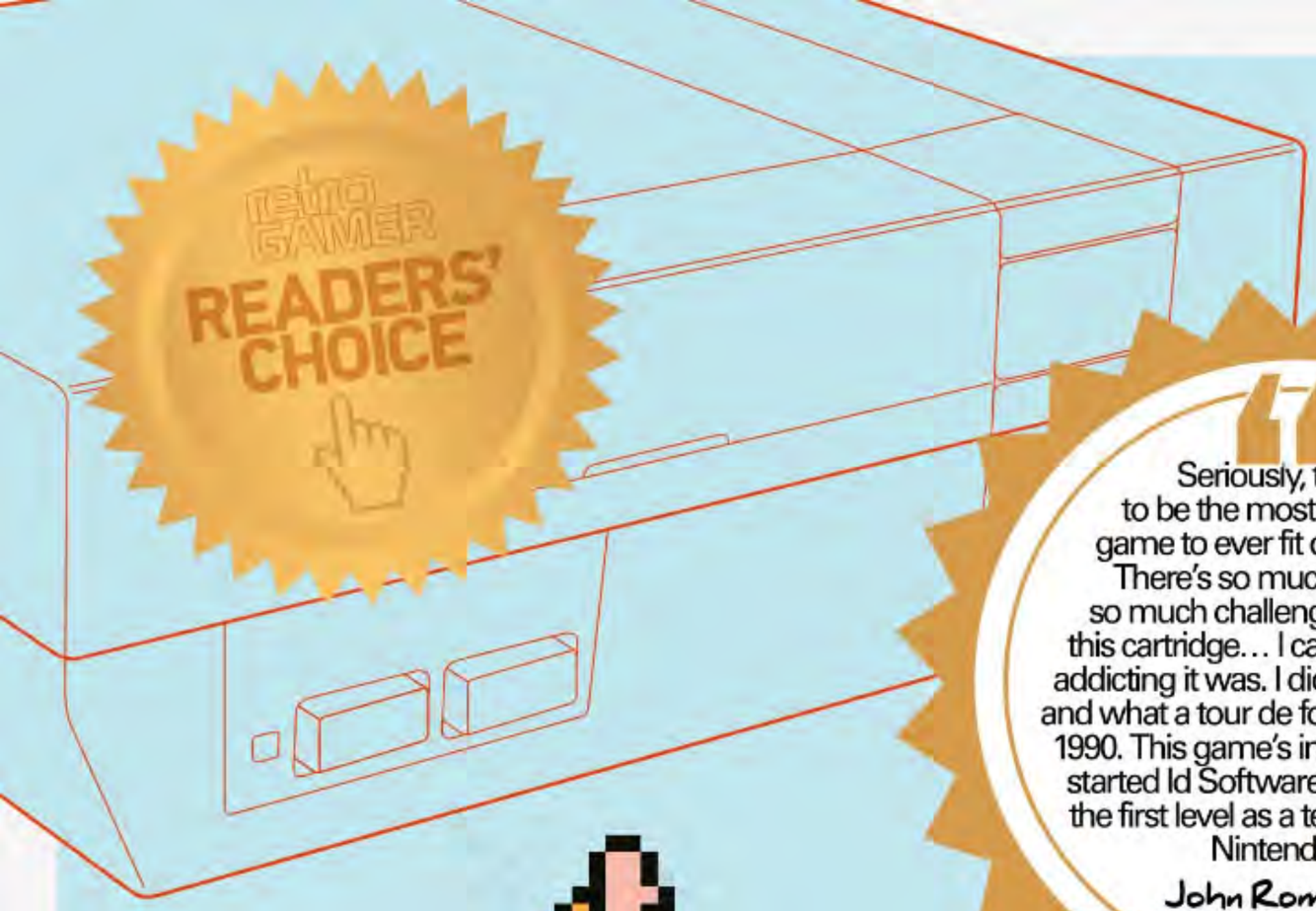
■ **DEVELOPER:** Nintendo R&D4 ■ **YEAR:** 1985 ■ **GENRE:** Platform

2 **We miss the** days of pack-in games. During the Eighties and Nineties, console manufacturers often seemed to make a special effort to ensure that every buyer would have at least one excellent game to play – and *Super Mario Bros.* was most definitely an excellent game. While Mario had made his debut in *Donkey Kong* and become a headline name in *Mario Bros.*, it wasn't until *Super Mario Bros.* that he became a real star. Whether it was alone or combined with *Duck Hunt*, *Super Mario Bros.*' long-term status as a pack-in game meant that over 40 million gamers would get to experience this star-making game.

One of the key secrets of *Super Mario Bros.*' success is that the game explains itself very well through level design alone. The initial screens are a masterpiece of game design, as you're wordlessly taught the function of enemies, mushrooms and question blocks. As the first game that many players experienced on a new system – and as the NES introduced so many players to videogames – this ease of learning was absolutely vital.

The learning curve also disguised that *Super Mario Bros.* was a complex game for its time, splicing many disparate elements of game design. We'd seen sections that allowed you to skip ahead in *Pitfall!*, power-ups in *Pac-Man* and bosses in *Phoenix*, but all of these combined in *Super Mario Bros.* to make an adventure of a kind never seen before. The variety was aided by the secrets that the game offered, from hidden items to warp zones, and difficulty was perfectly pitched to ensure while *Super Mario Bros.* posed enough challenge to last, but was no ordeal. Games that complement consoles this well are exceedingly rare.

> To me *Super Mario Bros.* original for NES is the definitive *Super Mario* platformer. Not only did it set a new benchmark for platformers, it also had an awesome soundtrack.
>
> Jim Bagley, SpecialFX



Retro Gamer Readers' Choice

> Seriously, this has to be the most impressive game to ever fit on a cartridge. There's so much gameplay, so much challenge packed into this cartridge… I can't tell you how addicting it was. I did finish the game and what a tour de force it was back in 1990. This game's inspiration is what started Id Software – we replicated the first level as a test and sent it to Nintendo!
>
> John Romero, id Software

5 reasons why it's great

1 Items like the Super Leaf gave Mario new abilities such as flight, enabling new level designs.

2 It offers a huge amount of content, with dozens of stages for players to tackle and master.

3 Even the level selection screen exudes character, thanks to its framing as an animated map.

4 If there's a argument against hopping around in a shoe, we have never heard it.

5 It perfected the *Mario* model, providing the template for every 2D *Mario* adventure since.

> An astounding sequel – so much so that the later games have to be considered evolutionary after this revolutionary leap.
>
> ArchaicKoala

> Remains for me the pinnacle of 2D platform gaming. Imaginative, infuriating, wonderful, frustrating, joyful, tearful and ultimately entirely rewarding and magical. I kept the NES on for a week to prevent loss of progress.
>
> Gregg Mayles, Rare

SUPER MARIO BROS. 3

■ **DEVELOPER:** Nintendo R&D4 ■ **YEAR:** 1988 ■ **GENRE:** Platform

For Nintendo R&D4, developing *Super Mario Bros. 3* must have been a tough task. It would have been absurd to expect the development team to take an already-beloved classic and improve upon it in every single aspect. It is to the credit of Shigeru Miyamoto and his team that they didn't just attempt it, but managed to succeed in doing so.

The Japanese version of *Super Mario Bros. 2* (known internationally as *The Lost Levels*) had been a very small upgrade over its predecessor, with slightly improved visuals and a few new hazards (such as the Poision Mushroom), and primarily offered more challenging stages for players that had mastered the original game. Contrast this with *Super Mario Bros. 3*, which offered all-new visuals, new music with additional sound effects, a variety of new enemy types, new power-ups, new blocks – if you could name something in the original *Super Mario Bros.*, Nintendo had managed to identify and implement a fantastic new spin on it in their new game.

These new elements allowed for some incredibly clever level designs too, from the floating platform challenge of stage 1-4 to the complex cannon arrangements of the airship levels. Many stages take new mechanics, implement them in every way you can think of, and then add a few you had missed just for good measure. Even something as simple as the introduction of sloped surfaces allowed for a new move and new opportunities for fun, as Mario could slide downhill on his backside and take out enemies with his momentum alone. What is truly amazing is that the high quality, inventive level designs are so consistent, given how numerous they are – the game's eight worlds feature an astonishing 90 stages.

With the American audience whipped into fever pitch by pre-release footage in the movie *The Wizard*, *Super Mario Bros. 3* was always going to do well. Even so, the game was an unprecedented commercial success, becoming the best-selling non-bundled NES game – and along with its predecessor, one of only two such games to exceed the 10 million mark. The game has been ported and remade often and continues to perform remarkably, selling over 3 million copies when remade for the Game Boy Advance, and another million as a Virtual Console game on the Wii.

Super Mario Bros. 3 is a game that contains just about everything that a fan of platform games could want. If you want a game with tight, responsive control, that's covered. If you want variety, the game offers dozens of levels, many enemies and an array of interesting power-ups. If you want clean, attractive visuals and timeless tunes, this classic beast of a game has them. If there is such a thing as a perfect videogame, *Super Mario Bros. 3* is the closest that the NES ever got to delivering it.

"In 1991 as a birthday treat my Dad took me to the World Of Commodore show and offered to buy anything I wanted. We left empty handed and instead bought *Super Mario Bros. 3*."

Steve Lycett, Sumo Digital

THE LEGEND OF THE LOST CITY

IN THE KNOW

- **» PUBLISHER:** Milton Bradley
- **» DEVELOPER:** Rare
- **» RELEASED:** 1990
- **» PLATFORM:** NES
- **» PLATFORM:** Dig-'em-up

Glance at the list of titles on the recently released Rare Replay and with familiar names like Knight Lore and Jetpac you'll spot a little known NES game. Paul Drury unearths the story of Digger T. Rock with the help of chief miner Andy Walker

It all started with a phone call. "It was Tim Stamper, out of the blue," remembers Andy Walker, creator of *Digger T. Rock*. "I had not talked to the Stampers for years but they were the sort of people that you'd want to get a call from. Tim's opening line was, 'Remember *The Pit*?'"

Of course Andy remembered the coin-op that had begun his videogame career. Back at the start of the Eighties, he and his employee Tony Gibson had created *The Pit* using customised Tangerine machines. When American publisher Centuri picked up the title for release in 1982, they recoded it to work on their bespoke arcade hardware and then Chris Stamper converted that version to run on a *Galaxian* board for the UK market. If you ever played the fine tunnelling and jewel-snaffling game in this country, you were actually playing one of the Stampers first published titles, before they moved their magic on to the Spectrum as Ultimate Play The Game and Nintendo consoles as Rare.

The Pit was a huge commercial success and helped fund Andy's next venture. Taskset became one of the premier Commodore 64 developers of the first half of the Eighties, responsible for such esoteric hits as *Bozo's Night Out* and the *Super Pipeline* series, but financial pressure let to the closing of the company in 1985. Andy continued as a freelancer games developer, working on such titles as *Uchi Mata* and *Dragon's Lair* for the C64, and in 1988 was working on *Chevy Shuttle* for the Amiga when he received that rather unexpected call from Tim Stamper.

Tim's plan was to update *The Pit*, capitalise on the gameplay elements that had made it such a money spinner, and create a console title for Rare's illustrious Japanese partners, Nintendo. The NES was new territory for Andy, though, so he immediately bought a top-of-the-range Amstrad PC, with a hefty 20MB hard drive, as the heart

» There's always stuff to do in Digger T. Rock but you don't always have the time to do it.

» This section requires you to have stockpiled enough dynamite to blast your way through.

» Collecting dynamite becomes crucial, particularly when tackling later levels.

of his development system and decamped to the upstairs bedroom of his Bridlington home to begin work.

"Actually, there were lots of commonalities between the NES and C64," notes Andy. "It had sprites and you could scroll in any direction. It was friendly hardware and I felt at home, though I'm greatly indebted to Chris Stamper for much mentoring and encouragement. And Tim was quick to say, 'That's good, that's crap, now why don't we do it this way?' Nothing was precious…"

The game developed very much as an open and honest conversation between Rare and Andy. Large sheets of graph paper began to spread across the wall of his homely development studio, with sketches for caverns and scribbled notes suggesting a rock here, a diamond there and a pesky giant mosquito to attack you unexpectedly as you dropped from that ledge. The cave system that the determined Digger descended into expanded as if Andy was scooping out the earth as he went, creating passageways, rocky outcrops and secret tunnels.

New features evolved to help our trusty miner navigate the cavernous levels, so now he could drop a rope ladder into the depths to prevent a fatal fall and use dynamite, *H.E.R.O.*-style, to blow up cave walls on the way to the exit. Power-ups could be dislodged by bashing the stony ceiling, giving super strength or the handy ability to chuck rocks to flatten advancing foes. There were hidden shortcuts and level warps to discover… hang on, Andy, isn't this sounding like a job for a certain plumber we know?

"That feeling of opening a cavern for the first time, that sense of discovery, those are real Tutankhamun moments!"
Andy Walker

"Yes, *Mario* was definitely an influence," he grins. "There's so much in those games, it's bound to be an influence on anything NES."

What *Digger* shares with the superlative *Mario* series is that thrill of fresh discoveries. When you stumble through a concealed entrance and a whole new section of the cavern opens up or you slip through a hidden crawl space on your belly and find yourself transported to a forgotten hollow, with diamonds glinting in the dark, you realise there's so much more to this underground world than a glance can reveal. You have to explore and experiment and never tire of tapping your trusty shovel against your rocky surroundings, hoping to make a breakthrough. "That feeling of opening a cavern for the first time, that sense of discovery," Andy muses, proudly, "those are real Tutankhamun moments!"

There is treasure to be found, of course, though your first priority is to locate the correct column that, once stood on, will open the doorway to the next cavern. In early levels, this is pretty straightforward, but as your quest for the mythical Lost City progresses, the task becomes increasingly arduous, culminating in the eighth and final cave having more columns strewn through it than ancient Athens. You'll require the patience of Penelope to step on each until you finally unlock that last barrier. "Honestly, the plan was never to f**k the player up," Andy assures us with a malevolent chuckle. "You can mislead them, but that's all."

Exploring the expansive levels and negotiating everything from icy floors to floating platforms and precarious boulders would be taxing enough ▶

» Each level concludes with a bonus stage, clearly inspired by the jewel cave in *The Pit*.

» The T-Rex is one of the more vicious foes Digger must face.

DIGGER T. ROCK 101

■ Adventurous underground man Digger T. Rock is tasked with negotiating his way through eight expansive caverns in search of the fabled Lost City. In his way stand numerous subterranean nasties, from vicious insects to enraged dinosaurs, as well as helpful equipment to collect to ease his journey. Combining exploration with close combat – your shovel serves as a useful weapon as well as a tunnelling tool – and some puzzle elements, the game is varied, challenging and full of secrets to uncover.

» Andy Walker is best known for his *Super Pipeline* games and forming Taskset.

DEVELOPER HIGHLIGHTS

SUPER PIPELINE
SYSTEM: C64
YEAR: 1983

POSTER PASTER
SYSTEM: C64
YEAR: 1984

GYROPOD (PICTURED)
SYSTEM: C64
YEAR: 1984

» Andy was surprised to see *Digger T. Rock* appear on the recently released *Rare Replay*.

▶ but these caves are far from empty. An array of adversaries populated this subterranean world: ghosts, skeletons and club-wielding, bearded cavemen all stood in your way before the final showdown with an angry egg throwing T-Rex. Yet your ultimate enemy was time itself.

"It was about exploring but we also wanted this time pressure," explains Andy. "Yes, you got out but look what you missed! You didn't get enough diamonds and you're going to need more dynamite later on. That was what *Digger* was about. There was always things to do but you better not because you won't make the exit in time. The whole gameplay of *The Pit* was based on the panic notion that you were going to run out of time… and you make poorer decisions when there are only seconds left."

Those of you familiar with *The Pit* will remember the 'Zonker' – the tank at the top of the screen that steadily blasted through a small hill, getting ever closer to destroying your spaceship, your only means of escape to the next level. That sense of urgency wasn't the only gameplay element *Digger* co-opted from its arcade forebear. If you do reach the exit, Mr T. Rock finds himself in an enclosed cave strewn with jewels to plunder if he can dodge a hail of rocks, a direct update of the gem room in *The Pit*.

» A delighted Digger finds the exit. It's all downhill from here, little man.

C64 gamers will also spot nods to Andy's past games throughout *Digger*. The way you enter your initials on the score table is directly lifted from *Super Pipeline* and the cartoon humour and graphical wit are very much in keeping with his Taskset titles. "Hitting the baddies with the spade and the little swipe marks and movement blur and skidding on your arse over the ice, Tim and I knew that would make it funnier," Andy smiles. "You're absolutely right with the link to Taskset days. It's in the DNA isn't it? There's a certain smugness in it, too, which usually comes before a fall…"

After 18 months of work, *Digger* was nearing completion, though not before the Stampers reminded Andy he needed to produce a 60Hz version for the American market alongside the UK's 50Hz one, requiring an almighty three month effort to make everything work in the shorter refresh time. The Rare boys were with him all the way, though, providing graphical data, technical support and plenty of warm welcomes when he made his frequent visits to their manor house headquarters in Twycross.

"I remember thinking, 'Gosh, what a big drive the Stampers have

RARE'S ESSENTIAL NES GAMES

The was still plenty of goodness after Ultimate transformed into Rare

COBRA TRIANGLE

■ *River Raid* meets *Micro Machines*, this shooter has you dodging various water-based hazards and blasting rivals while racing to the finish line in your powerboat. Waterfall jumping and battles with sharks and water wyrms keep things interesting in one of Rare's early NES games.

SNAKE RATTLE 'N' ROLL

■ More isometric adventures, this time featuring a pair of snakes determined to scoff enough 'Nibbley Pibbleys' to bulk up and unlock the level exit by popping on the weighing scales. The action is frantic, with lots of visual humour and a rocking score by David Wise.

BATTLETOADS

■ Probably Rare's best-known NES title, these pugilistic amphibians were clearly created to grab a slice of the scrolling beat-'em-up pie from those hugely popular teenage turtles. Great fun in co-op mode, mainly because you can act very uncooperatively, *Battletoads* is loved by many.

RC PRO AM

■ Though *RC Pro Am* stands in a long line of isometric racers, it can hold its bonnet up high. Taking inspiration from Atari's *Super Sprint* with a hint of Ultimate's own Spectrum racer *TransAM*, the combative driving clearly went on to influence such games as *Rock N' Roll Racing*.

SOLAR JETMAN

■ Another Rare title that touched on its Ultimate heritage, this was mainly the work of Ste and Jon Pickford. Combining *Thrust*-style combat with some unwelcome spacewalking interludes, this is an ambitious and polished game somewhat marred by its crushing difficulty.

got,'" says Andy. I spied a really nice Porsche Speedster in one and a Lamborghini next to it. Yeah, that gets your attention. The lunches were great but you know they were family-orientated. Chris was and still is a wizard, a complete magician, but didn't think he was. Tim understood design, Carol had very good business sense and their dad made sure their feet kept in contact with the ground. They weren't up their own arses in any way. "

After many nervous waits for approval from Nintendo, *Digger T. Rock* was cleared for release in 1990 through Milton Bradley. Andy acknowledged it was a tough game and along with a generous allocation of lives, he kindly included some handy cheats, triggered in an ingenious manner. "I was once a sparky in the merchant navy so on the copyright page, if you tap the A button to spell the letter 'X' in Morse code – a dash, two dots and a dash – you'll get infinite explosives. Spelling 'L' does it for lives, too!"

It's one of so many clever touches that make *Digger T. Rock* a pleasure to discover. Though it sold in its hundreds of thousands and was the best-selling title of Andy's career by far, earning him "a good five figure sum, thanks to a terrific royalty deal," it came out near the end of the NES's life and is probably less well remembered because of it. The

» Like the Morlocks with more facial hair, the cavemen don't look too happy to be stranded underground.

» Digger successfully locates the column which will open the exit, Sesame-style.

» Digger's tool of choice serves as both earth mover and an enemy basher.

sequel alluded to in the credits never materialised, something Andy would have rectified with hindsight. "It was an aspiration that both Rare and I had to do another *Digger* game but things were moving on at the time. I should have planned how to make it easier to move it to the next console. It was one of the last NES games – the wrong end of the console's life. To port it to the SNES would have been a massive effort. A better decision would have been thinking about where *Digger* could go next."

As it turned out, it was a case of Andy deciding where he needed to go next. Having spent the Eighties making games, the Nineties saw him move into the slot machine industry, where he stills works today. *Digger* became his swan song though thanks to the release of the *Rare Replay* compilation earlier this year, his plucky miner is back for an encore.

» Hitching a ride on a floating platform is handy but watch out for that skeleton...

"I was surprised," he admits. "I had no idea it was happening until my lad Ben told me. I went on the internet and bloody hell, there it was! You get that warm feeling that you knew something about this stuff once. "

Before we leave Andy, we need to check one final thing. What does the 'T' stand for in Digger T. Rock? Could it be Tiberius, in tribute to Captain James T. Kirk, another man boldly going where others hadn't?

"I don't know," Andy laughs. Well, a Rock by any other name would still play as sweet. *

Thanks to Andy for his tales and Martyn for his help.

"The Stampers weren't up their own arses in any way"

Andy Walker

» The fountain of youth awaits Digger in the Lost City, though sadly a sequel never came to be.

THE DIGGING CREW

More underground adventurers

DIG DUG

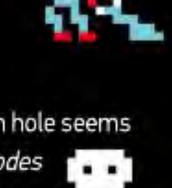
■ A pumper as much as a digger, *Dig Dug*'s star inflated his foes to death.

LEMMING

■ Springsteen was born to run, Thunders was born to lose and this

MR DRILLER

■ The Jamiroquai of videogaming, Mr Driller was born to go underground in daft headwear.



PITGUY

■ *The Pit's hero* took his parenting seriously and taught Digger all he knew about subterranean

REPTON

■ Another earth-mover with a weakness for gems, Repton used his brain

ROCKFORD

■ Rockford's soul-tinged brand of pop rock was a big hit in the Eighties. Hang on, that

SPACE PANIC

■ The daddy of diggers, the hero of *Space Panic* did much of the

YESOD MOLE

■ If digging your own hole seems hard work, follow *Nodes Of Yesod*'s lead and enslave a mole instead.

ROBBY

■ Robby Roto just wanted to turn frowns upside down by rescuing trapped souls.

Km/H
97
3.
PLAYE
BLUE

Slalom

FIRST LOVE ON THE SLOPES

RETROREVIVAL

» NES
» 1987
» RARE

***Slalom* is one of those videogames that's impossible not to like. It looks nice, it's fun and accessible, and to top it all off it has a bit of history too: it marked Rare and Nintendo's first ever romantic embrace, a cupid's arrow that helped form a much publicised videogame relationship that verged on Brangelina and Wills and Kate type proportions at one stage.**

Indeed, back in the Nineties, if Rare and Nintendo had been famous, pretty people then the paparazzo would have been clawing each other's eyes out to get intrusive blurry snaps of them sunbathing together on a private yacht somewhere in the Caribbean. And let's be honest, there isn't a soppy-hearted retro gamer alive who wouldn't love to see the two of them get back together again, regardless of how improbable such an Earth-tilting reunion happening is.

Anyway, back to *Slalom*. Well, like most Stamper Bros. games, it's an impressive beast visually and technically, and like its creators, started life in the arcades where it debuted on Nintendo's arcade Vs. System bearing the name *Vs. Slalom*, before it was ported to the NES the following year. *Slalom* is essentially a checkpoint racer, one that sees you lead a little skiing dude with the most animated 8-bit arse in videogame history through 24 different tracks, split across three mountains courses of varying difficulties.

On these perilous routes are obstacles which obviously have to be avoided, and slalom gates that must be passed on the correct side. Pass on the wrong side, or stumble into a snowman, rival racer, trees, or basically anything that isn't pure driven snow, it slows your racer down. It is also possible to perform various airborne tricks, which award extra points but at the risk of losing valuable speed if you fail to perform them correctly. It therefore becomes vital that you pass every gate and pay close attention to what's coming up ahead on screen to successfully complete the later courses.

Slalom certainly isn't the most famous nor fondly remembered Rare creation but it does contain plenty of charm. So if you fancy getting piste, why not take to its slopes?

30 GREATEST SUPER MARIO MOMENTS

The Super Mario Bros. series has been defining gaming for over 30 years. We've selected 30 of your favourite moments from the series and asked developers to share their memories about the hit franchise

Mario is easily one of gaming's most iconic and recognisable figures. While he's been around since 1981 in the guise of Jumpman, it wasn't until he became super in 1985 that gamers really started to take notice of the mustachioed plumber.

When Shigeru Miyamoto created *Super Mario Bros.* he also effectively recreated the platformer, creating a template that would not only shape the later *Mario* games for many years, but also platformers in general. Nintendo would again change the goalposts in 1996 with *Super Mario 64* and while other contenders have come close, no current developer is making 3D platformers that can compete with the likes of *Super Mario Galaxy* and *Super Mario 3D World,* in short Mario is the king at what he does and it's a fact that's unlikely to change any time soon.

We've covered Mario's history in the past (in issue 82 no less) so we instead wanted to look at why the *Super Mario Bros.* series has become so popular with gamers. There's a reason why *Super Mario* games have sold nearly 300 million sales and it's because they're some of the most inventive and well-designed games of their genre. But don't just take our word for it, the following moments are some of your favourites and we've also persuaded a large number of classic developers to share their personal memories too. Here's hoping the plumber reigns supreme for another 30 years.

DEFINITIVE SUPER MARIO BROS. TIMELINE

SUPER MARIO ODYSSEY 2017
NINTENDO Switch

SUPER MARIO MAKER 2015
NINTENDO WII U

SUPER MARIO 3D WORLD 2013
NINTENDO WII U

NEW SUPER MARIO BROS. U 2012
NINTENDO WII U

NEW SUPER MARIO BROS. 2
NINTENDO 3DS

SUPER MARIO 3D LAND 2011
NINTENDO 3DS

SUPER MARIO GALAXY 2 2010
NINTENDO WII

NEW SUPER MARIO BROS. WII 2009
NINTENDO WII

SUPER MARIO GALAXY 2007
NINTENDO WII

NEW SUPER MARIO BROS. 2006
NINTENDO DS

SUPER MARIO SUNSHINE 2002
GAMECUBE

SUPER MARIO 64 1996
NINTENDO 64

SUPER MARIO LAND 2: 6 GOLDEN COINS 1992
GAME BOY

SUPER MARIO WORLD 1990
SUPER NINTENDO

SUPER MARIO LAND 1989
GAME BOY

SUPER MARIO BROS. 3
NES

SUPER MARIO BROS. 2 1988
NES

SUPER MARIO BROS.: THE LOST LEVELS 1986
NES

SUPER MARIO BROS. 1985
NES

WORLD 1-1 Super Mario Bros.

There's nothing like your first time. As your finger jabs the rubbery start button of the controller, the screen goes dark and you're presented with a title card for World 1-1. You hear those first notes of the game's theme – a tune that will be etched upon your memory forever – and proceed into the first stage of *Super Mario Bros.*.

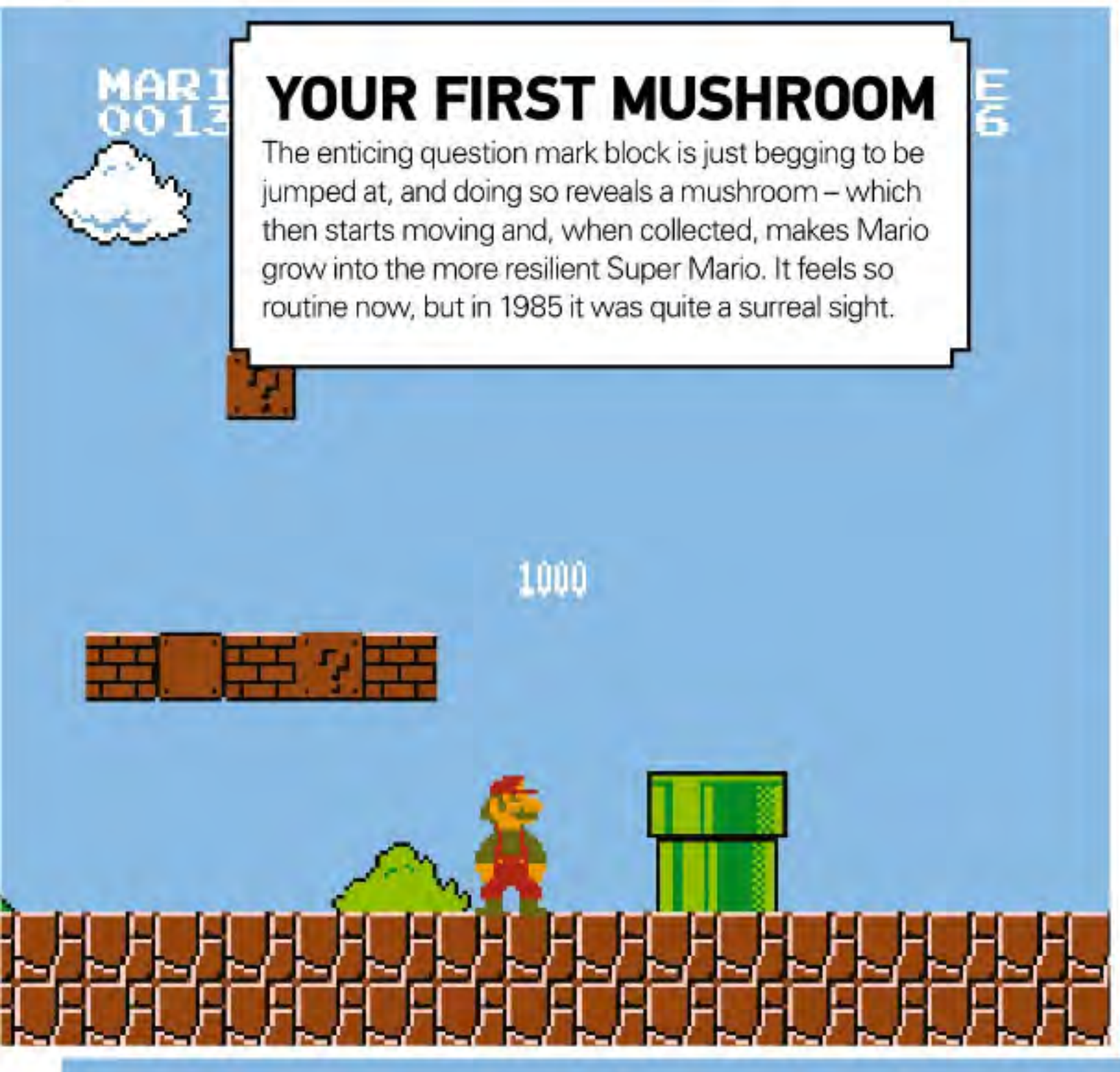
To this day, very few first stages do as good a job of equipping the player as that of *Super Mario Bros.*. The game doesn't need a wordy tutorial, because the level design does a great job of naturally creating curiosity and teaching the player about various game elements. All objects are placed on the right of the starting screen, encouraging you to move forward. Blocks bearing question marks draw attention to themselves, inviting the player to interact. The Goomba looks mean and advances towards Mario, making a confrontation of some kind inevitable.

World 1-1 contains enough challenge to make a player feel accomplished in victory, but is gentle enough that even a small child can finish it with a little practice. You'll play through it enough times to remember it by heart and learn to finish it in under a minute, but it never gets old because this first level *is Super Mario Bros.*.

"My favorite is the arcade version of [*Super*] *Mario Bros.* that I first saw. This game had numerous jaw-dropping moments for me that nowadays we take for granted, like a smoothly scrolling landscape. But what really blew me away was the moment I discovered I could enter certain green pipes and discover new areas. This simple feature made the entire *Mario* world seem vastly bigger and more mysterious to me. As children we're always fascinated by discovering caves and exploring what's inside them, and Mario captured that magic with the green pipes, each of which represented the possibility of an entirely new area to discover and explore. After that, secret areas became the norm in games, and I know in the Apogee and 3D Realms games I was involved in, we always tried to include as many secret area as we could. All because of *Mario Bros.*." **SCOTT MILLER, 3D REALMS**

YOUR FIRST MUSHROOM

The enticing question mark block is just begging to be jumped at, and doing so reveals a mushroom – which then starts moving and, when collected, makes Mario grow into the more resilient Super Mario. It feels so routine now, but in 1985 it was quite a surreal sight.



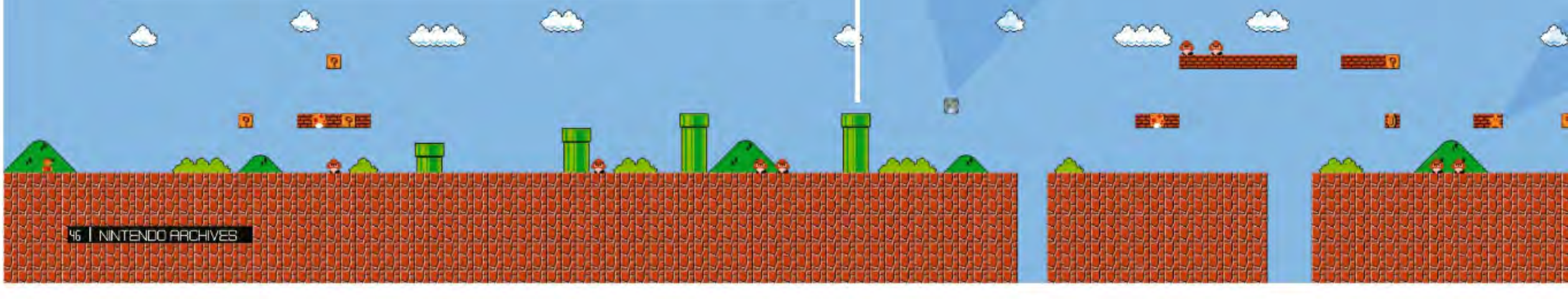
YOUR FIRST PIPE JOURNEY

"Speeding through World 1-1 on *SMB* NES and getting that first running jump to get the full 1000 points on the flagpole, giving the feeling that you're off to a great start. Yeah right!" **SAMHAIN81**

"The best thing I've ever done is a *Mario* game has to be discovering the first Warp in *Super Mario Bros.* on the NES. Discovering a secret vine, which then allowed me to climb outside of the top of the level and run across the top of it was staggering. There were five other people in the room and we were all gobsmacked to discover the Warp Pipes. Back then, cheats and secrets felt far more valuable than they do today." **ALEX WARD, CRITERION**

YOUR FIRST SECRET

You might find the hidden extra life on your first attempt at World 1-1 – it's easy enough to accidentally find. However, what's important is that you probably won't. You can keep discovering new things in *Mario* games after you think you've mastered them, and this secret is the first indication of that.



"It shouldn't come as any surprise that, as a game creator, my reaction to a game might be different from that of your average game player. The early *Mario* games on the NES bear this out.

My first reaction to *Mario* was surprise that the game so obviously used character-mapped background graphics. Shigeru Miyamoto made a conscious decision to build Mario's world out of blocks. In doing so, he allowed for a very large world due to memory efficiencies, but it represented a step backward in videogame imagery. He took a big risk. As *Super Mario Bros.* was the flagship game franchise that everyone would associate with the NES system itself, the risk was that gamers would consider the NES to be inferior hardware to machines of the day providing much more realism.

As it played out, the game overcame the risks involved. Using character-mapping the world could be much larger and the gameplay experience more richly rewarding. Players thought of the colorful, blocky game backgrounds as more of a fantasy art-direction than a technical limitation, and the gameplay was the star anyway."

DAVID CRANE, ACTIVISION

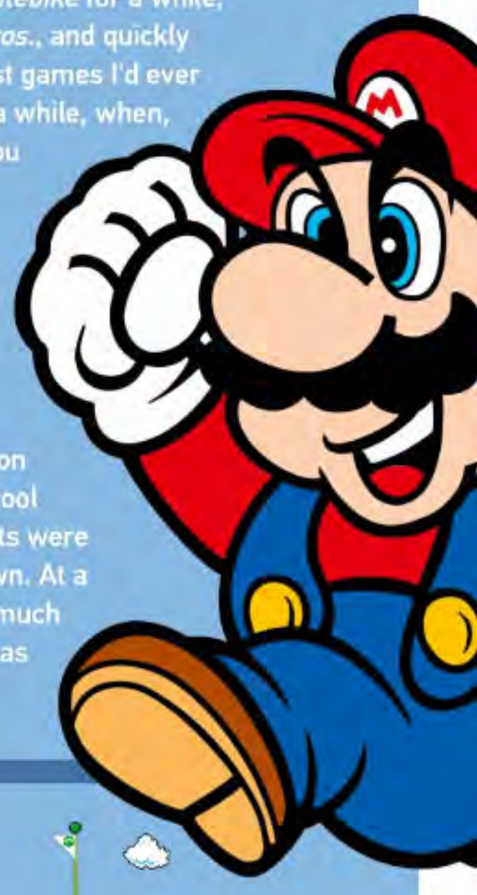
YOUR FIRST FLAGPOLE

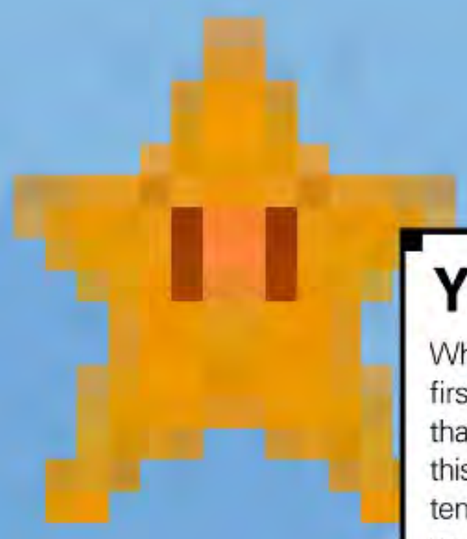
Even when your first moment of victory is in sight, there's one last challenge as you try to jump to the top of the flagpole for more points. If you're lucky, you might even get some fireworks after lowering the flag! It's a smart and iconic bit of game design.

As a plumber, it makes sense for Mario to hang around pipes. It doesn't make quite as much sense for him to travel through them, but after the first time you travel down one and find a secret cache of coins, you'll always check them for hidden rooms.

"My favourite *Mario* moment comes from what I believe was my first session playing the game while visiting Activision when I was working at *ZZAP!64* back in late-1985 or very early-1986. It had a new imported NES and an American TV to play it on. I'd been playing *Excitebike* for a while, but then switched to *Super Mario Bros.*, and quickly realised that it was one of the coolest games I'd ever played. I'd been running around for a while, when, by sheer fluke, I discovered that if you pulled down on the joypad while standing on a certain pipe, Mario was transported to a different area. Sure, that's a standard thing these days, but back then, the feeling of discovery, and the realisation that there was another world under the one I was standing on was incredible: it made a seriously cool game even cooler. What more secrets were there to uncover? My mind was blown. At a time when most games didn't have much in the way of hidden stuff, it really was a revelation. What a game!"

JULIAN RIGNALL, JOURNALIST





YOUR FIRST STAR

When a flashing star is revealed for the first time you automatically imagine that it's something pretty special – and this one doesn't disappoint. Mario's temporary invincibility turns him into a wrecking machine, capable of running straight through his foes without fear. It's an amazing feeling of power.

GOING OUT OF BOUNDS

AS SEEN IN: Super Mario Bros.

2 Placing the ceiling of *Super Mario Bros.*' underground stages below the HUD was a genius move on Nintendo's part, as it makes it look like there's a fixed status bar. As a result, jumping out of the normal play area and running along the top of the screen feels like you're breaking the game – and better yet, if you can make it past the exit pipe you'll reach the Warp Zone.

FOUR WAYS TO PLAY

AS SEEN IN: Super Mario Bros. 2

3 Not only does *Super Mario Bros. 2* let you play as Mario's friends, it makes doing so very worthwhile as every single one has unique characteristics. Luigi's a bit slower and weaker than Mario, but jumps higher. Toad has a short jump, but is fast and pulls up veggies quickly, while Peach (or Princess Toadstool) has a unique floating jump. It was a joy to discover which one suited you best.

"In 1988, while working at Origin Systems, we had a Japanese Famicom system and I remember playing *Super Mario Bros. 2* on it – it was really cool to see Mario again but with blowing wind and leaves! It turns out this version never made it to the US because six months later *Super Mario Bros. 2* got to the States and it was the re-skinned *Doki Doki Panic* game (still awesome).

I also remember just how incredibly difficult World 8 was in *Super Mario Bros. 3*. The game was incredible, really a tour-de-force of game design, and was perfect in almost all respects. I finally beat it and count it as one of the hardest games I've played."

JOHN ROMERO, ID SOFTWARE

WORKING THE SOIL

AS SEEN IN: Super Mario Bros. 2

4 Owing to *Super Mario Bros. 2*'s origins as a different game, the core gameplay changes a bit from the original game. The most notable new feature is the ability for Mario and friends to pluck items from the dirt – usually vegetables to be thrown at enemies, but sometimes more special items like potions that create doors into subspace or rockets that blast you to the next part of the game. Sure, you can jump on enemies and lift them instead, but even lobbing Shy Guys isn't as fun as a little gardening – the little moment of anticipation as each root is pulled makes the activity rather compulsive.

PLUCK TALES

Here are all the items you can retrieve from the ground in Super Mario Bros. 2

"Oh man I'm not even sure how to pick one! I guess the first time I saw a Door Potion in *SMB2*. What a supremely weird game item!"
ADAM SALTSMAN, ADAM ATOMIC

"My memory has to be playing *Super Mario Land* on the Game Boy in 1989. This was my first *Mario* game, having worked at a games shop that decided to sell the Sega Master System – you weren't allowed to sell Sega AND Nintendo – I had never seen a NES. I had my own Game Boy and this was the game I bought with it. After my first go I became aware of how well laid out and devious the levels were. Once I'd got used to [it] I realised that four hours had passed. I was well and truly addicted and the various tunes had been ingrained into my brain for all time. The game also succeeded at getting family members, who had shown no interest in my previous machine, the Spectrum, bopping baddies and exploring tunnels. A recent replay showed to me that the game had lost none of its playability and still had that 'one more go' factor that it had 26 years ago."
MARK R. JONES, OCEAN SOFTWARE

SUBMARINE ATTACK

AS SEEN IN: Super Mario Land

6 Gunpei Yokoi's handheld *Mario* games offer a distinctive take on the design of the series, staying close to the original formula while introducing new mechanics. We always liked World 2-3, as Mario gets to hop in a submarine and blast away in a shoot-'em-up section. He gets to revisit this in the game too, this time taking to the skies in a plane!

MALIGNANT MUSHROOMS

AS SEEN IN: Super Mario Bros.: The Lost Levels

5 Some of the cleverest moments in *Super Mario Bros.* involve subverting the player's expectations, and this sequel did just that. In the original game, every mushroom was good – in *The Lost Levels*, you need to watch out for the Poison Mushrooms which damage you like an enemy attack.

"My favourite *Mario* moment is finding the Warp Zone at the end of 1-2. You thought you'd hacked the game! My least favourite moment, getting to 4-1 and finding Lakitu waiting with an inexhaustible supply of Spiny eggs to throw at you. I doubt it's a coincidence the two are linked."
STEVE LYCETT, SUMO DIGITAL

TAKING TO THE AIR

AS SEEN IN: Super Mario Bros. 3

Super Mario Bros. might have given Mario power-ups, but *Super Mario Bros. 3* was the game that made us fall in love with them and the reason was found in the very first stage. After picking up a Super Leaf, Mario gains ears and a tail to become Raccoon Mario – not only making him cuter, but also granting him the ability to fly! It works just as you'd expect, too. Mario must be running at top speed before you hit jump to initiate flight, meaning that you need a long stretch of 'runway' to get going. However, Raccoon Mario (and later Tanooki Mario) can reach areas that are otherwise totally inaccessible, so you'll try to launch whenever possible. The ability to fly added a lot to *Super Mario Bros. 3*, and it's no surprise that flight has been frequently revisited as a theme since.

FLIGHT ITINERARY

After taking to the skies for the first time, Mario decided that the airborne life suited him...

SUPER LEAF
From: Super Mario Bros. 3

CAPE
From: Super Mario World

WING CAP
From: Super Mario 64

F.L.U.D.D.
From: Super Mario Sunshine

BEE MUSHROOM
From: Super Mario Galaxy

> **"*Super Mario Bros. 3*, the Tanooki suit. I played it for ages thinking it was a great attacking move before being shown by a neighbour how to fly. The rest of my *Mario 3* career was attempting to recreate this."**
> BITTERTOAD

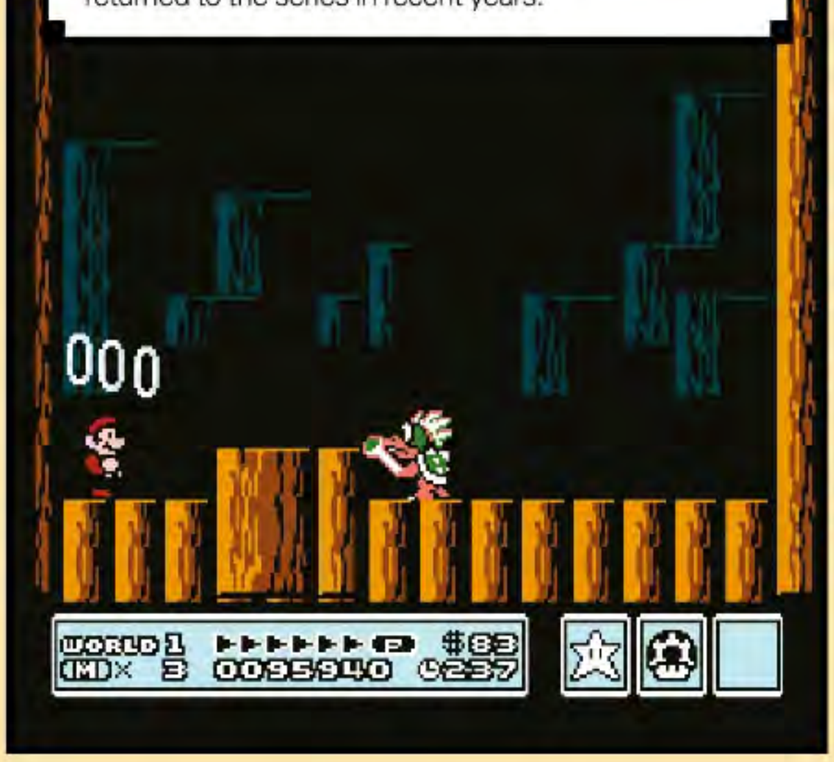
COSTUME PARTY

Mario just loves to dress up – here are some of our favourite outfits he's donned over the years...

MEETING THE FAMILY

AS SEEN IN: Super Mario Bros. 3

After repeatedly being bested by Mario in the first game, Bowser learned the joys of delegation and decided to reserve himself as a final boss. He's a responsible villain, though – to ensure that Mario still had bosses to fight, he brought in the seven Koopalings to do his dirty work for him. We've got a fair amount of affection for the Koopa kids, and we're very pleased to see that they've returned to the series in recent years.



"When you first fly with the racoon tail in *Super Mario Bros. 3* and realise how much of the game has opened up to you."
FLYING_DELOREAN81

"While almost impossible to pick one *Mario* moment above all others, one that does hold a very special place is my first encounter with the Racoon (Tanooki) Suit in *Super Mario Bros. 3*. As a pixel pusher, the sheer joy of seeing such an iconic character as our titular plumber suddenly in a fuzzy onesie literally made me grin from ear to ear.

A great moment in a series of games that seldom fails to bring back the childlike gamer in even the oldest of dinosaurs."
SIMON BUTLER, IMAGINE SOFTWARE

WHISTLE BLOWER

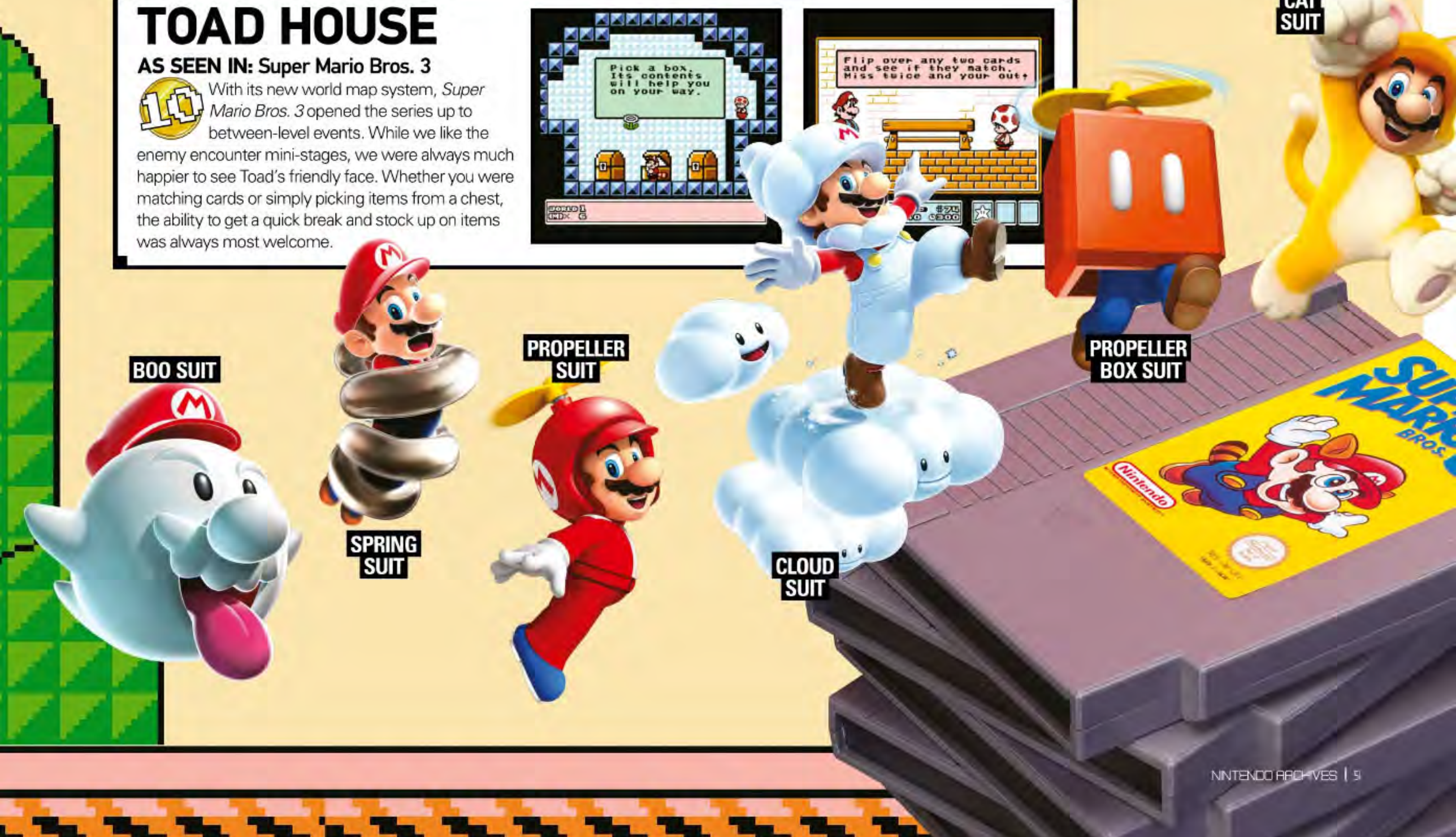
AS SEEN IN: Super Mario Bros. 3

Finding the warp zones in *Super Mario Bros.* is rewarding but obtaining warp whistles in *Super Mario Bros. 3* is even more so, especially because so few are available – just three in the whole game, and all of them within the first two worlds. Our favourite is the first. Find this white block in World 1-3, hold down on the D-pad for a couple of seconds, then run behind the scenery to the end of the stage!

TOAD HOUSE

AS SEEN IN: Super Mario Bros. 3

With its new world map system, *Super Mario Bros. 3* opened the series up to between-level events. While we like the enemy encounter mini-stages, we were always much happier to see Toad's friendly face. Whether you were matching cards or simply picking items from a chest, the ability to get a quick break and stock up on items was always most welcome.

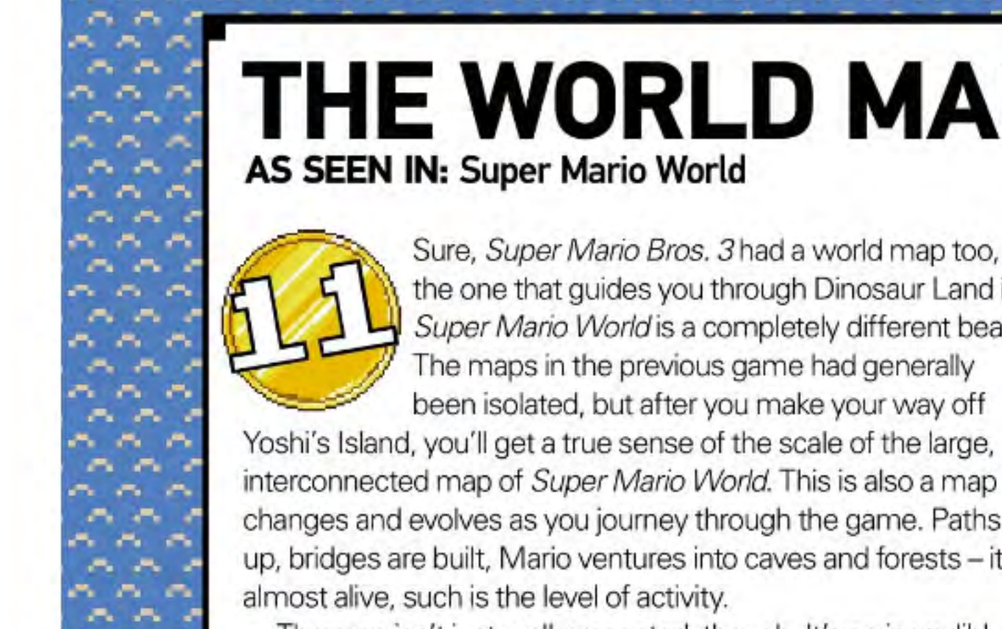


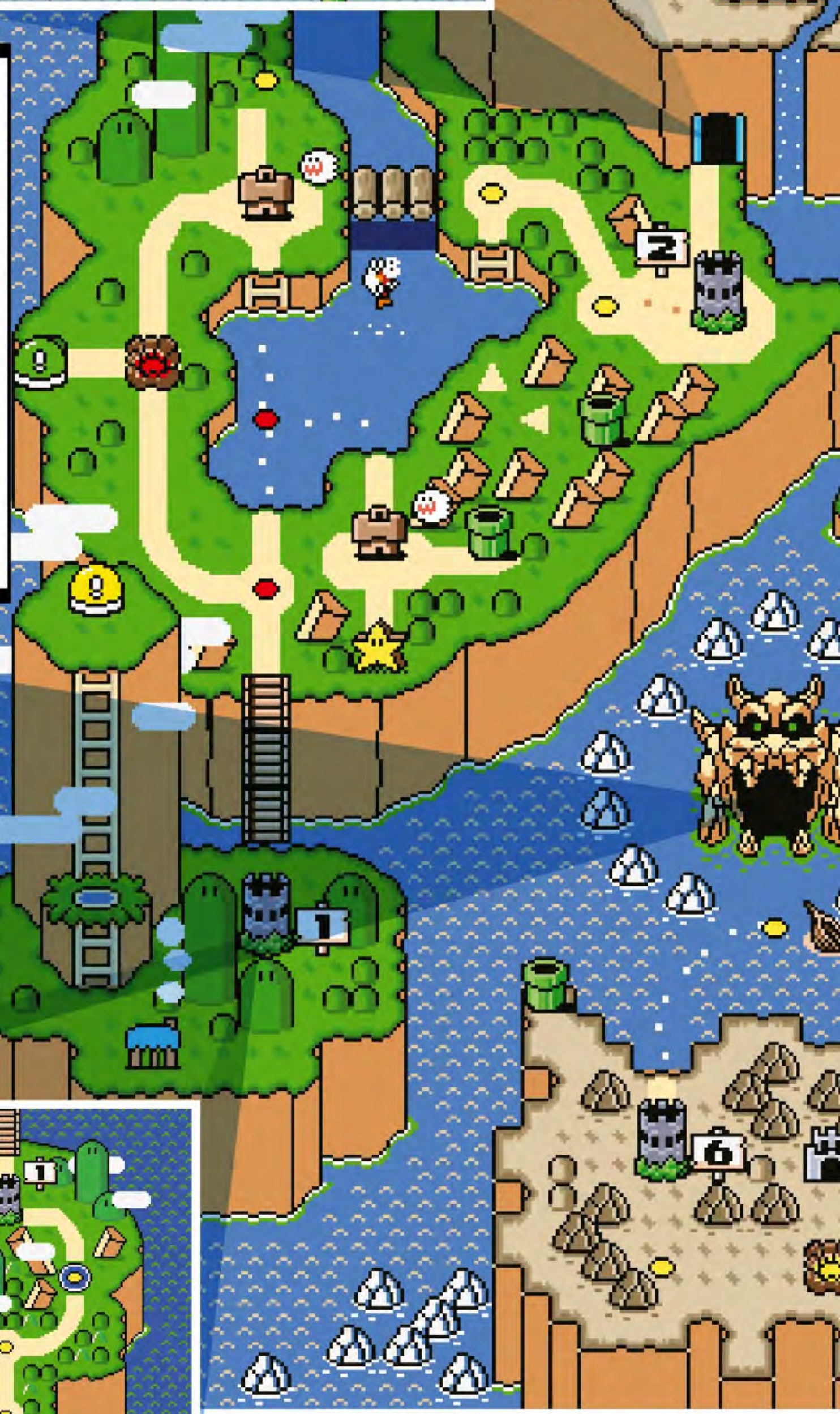
THE WORLD MAP

AS SEEN IN: Super Mario World

Sure, *Super Mario Bros. 3* had a world map too, but the one that guides you through Dinosaur Land in *Super Mario World* is a completely different beast. The maps in the previous game had generally been isolated, but after you make your way off Yoshi's Island, you'll get a true sense of the scale of the large, interconnected map of *Super Mario World*. This is also a map that changes and evolves as you journey through the game. Paths open up, bridges are built, Mario ventures into caves and forests – it feels almost alive, such is the level of activity.

The map isn't just well-presented, though. It's an incredibly useful tool for making your way through the game, thanks to the way it is set up. You can see the path you're supposed to take, but there's plenty of room left spare. Luckily, you'll soon find out that the red and yellow dots that represent stages mean something – the red levels have more than one exit, which gives you an idea of how to reveal the secret levels that occupy those seemingly empty areas of the map. But that's all the help the map will afford you, leaving the pleasure of discovery for the player to enjoy.

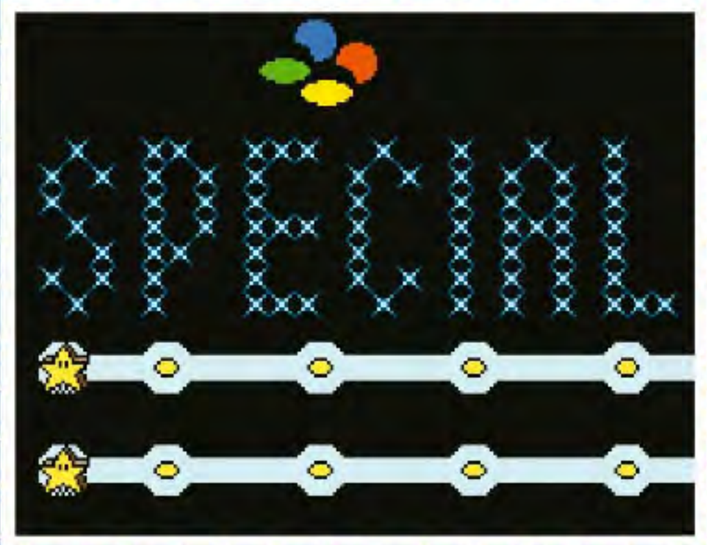




1 SECRETS WITHIN SECRETS

AS SEEN IN: Super Mario Bros.

Making it to Star Road feels very special – the unusual stages and different coloured Yoshis certainly give its stages a different feel to those on the main map. However, the truly special moment comes when you realise that the rabbit hole goes deeper, as the Star Road stages have their own secret exits too! If you find all of them, you can take a trip to the super-secret Special Stages, which will challenge *Super Mario World* experts to the limit.



> *Super Mario World* and finding a secret world within a secret world! My poor little pre-teen brain nearly exploded with excitement.
>
> JOLLY

> If I was to ever be stuck on a desert island and had one game to choose (and console, of course) I would go with *Super Mario World* and my SNES everytime, so many memorys attached to this game from the first levels to the hidden secrets and even the soundtrack to suit each stage. This could very well be my favourite game of all time.
>
> JON WELLS, ART EDITOR, RETRO GAMER

SWITCH PALACE

AS SEEN IN: Super Mario World

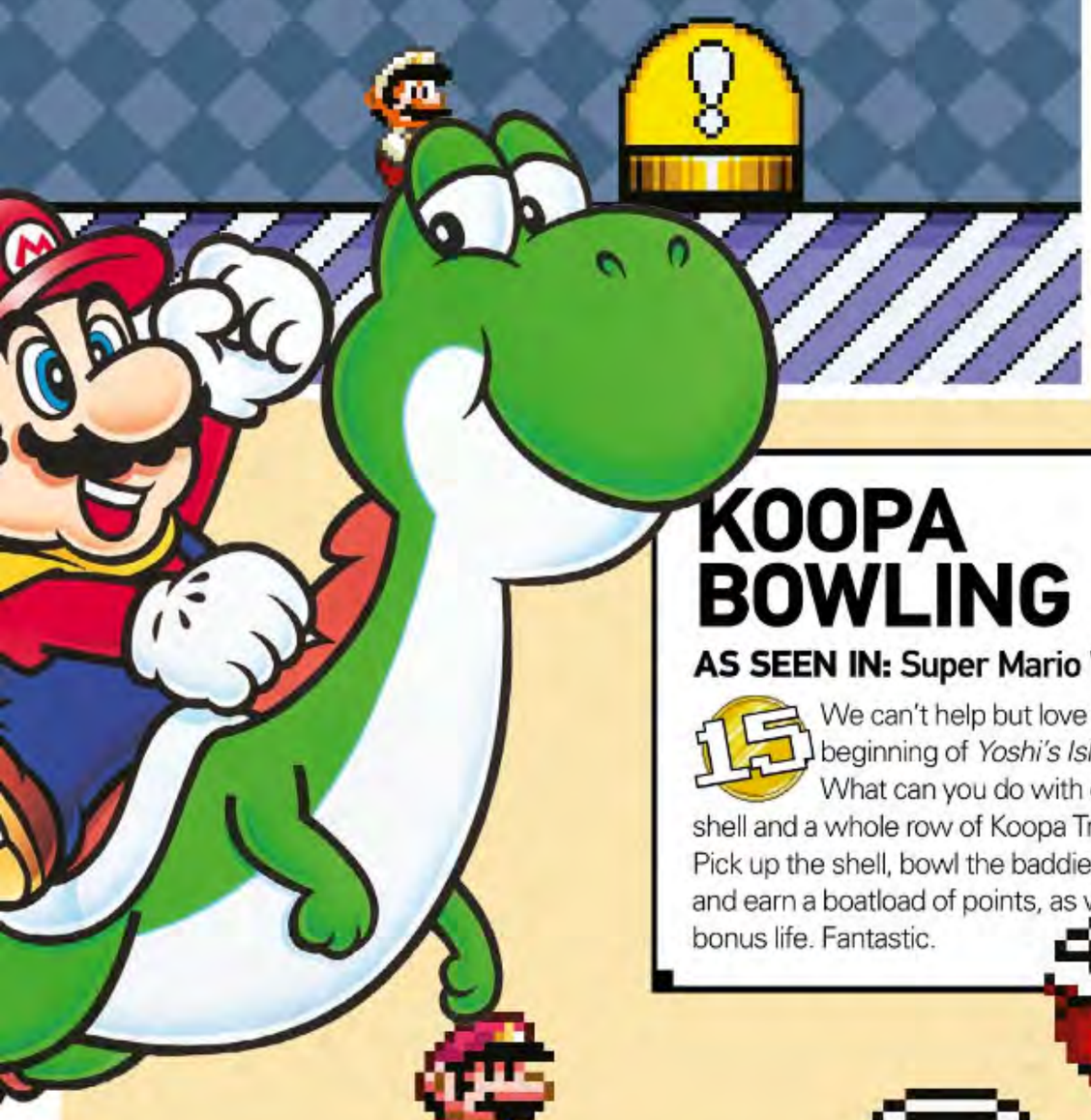
13 As the first game in the series to let you revisit previously beaten stages, *Super Mario World* had to have a compelling reason to bring you back. The Switch Palaces are just that reason – when you find one, not only do you get to enjoy a room full of coins, you activate new blocks in old stages. These open up previously inaccessible paths, changing levels you thought you knew.

"As with many others, my favourite *Mario* Moment is from *Super Mario World*. It's the first time you entered an underground cave, and specifically how the soundtrack and effects went all echo-y. Don't ask me why that should've stayed with me above something as spectacular as the opening of *Mario 64*. I just remember it feeling really clever, that they'd thought about using audio to provide a sense of space and place... and that the SNES was able to pull it off. It was the moment that I knew I'd spent my money wisely, and was the start of my love affair with Nintendo." **PAUL 'MR BIFFO' ROSE, DIGITISER 2000**

MEETING YOSHI

AS SEEN IN: Super Mario World

14 The first time you see Yoshi hatch from an egg, you can tell immediately that he's going to be one of Mario's most popular allies. This cute green dinosaur might not look at home with the cast of *Jurassic Park*, but he's a fearsome force, able to swallow many enemies whole and spit them out as projectile attacks. Not only that, but he shields you, gives you the ability to perform a double-jump, and adds an excellent bongo track to the music.



KOOPA BOWLING

AS SEEN IN: Super Mario World

15 We can't help but love the beginning of *Yoshi's Island 2*. What can you do with one red shell and a whole row of Koopa Troopers? Pick up the shell, bowl the baddies over and earn a boatload of points, as well as a bonus life. Fantastic.

"One of the first levels in *Super Mario World* where you launch a Koopa shell through about eight other Koopas. That never gets old." **TIM FITCHES**

GHOST BUSTING

AS SEEN IN: Super Mario World

16 Ghost Houses give you a break from action platforming, instead showing the versatility of the *Mario* formula by providing players with a mental challenge. From doors hidden behind unbreakable blocks to stages that seem to endlessly loop, the Ghost Houses throw all kinds of unusual challenges at you. Typically, the nature of the brainteasers means that you'll be more threatened by the clock than the slow-moving, shy Boos that populate these stages.

"I could tell you of the time I completed *Super Mario World* on the Super Famicom. It was entirely in Japanese, which meant I didn't know you could throw shells straight up in the air. That resulted in me having to go and get a cape, then make it all the way through the last level without getting hit. On the final screen, things got really tricky. You had to get a Koopa to drop at one side of the screen whilst you made it to the other. Then there was just enough room to run and get up to flight speed, at which point you had to jump and, on the way up, hit the Koopa and grab his shell at the same time. Then you could sail over the top of Bowser and drop the shell on him as normal. Rinse, repeat. Without getting hit – otherwise you'd lose your cape and have to go back to the previous level..."

ALEX TROWERS, BULLFROG

MARIO'S DARK SHADOW

AS SEEN IN: Super Mario Land 2: 6 Golden Coins

17

While meeting Wario is one of the franchise's most understated moments, it's nevertheless an important one, even if players didn't really know it at the time. When you first encounter him in *Super Mario Land 2* it's as a solid antagonist for the popular plumber, with the portly villain effortlessly standing in for Bowser. He crops up again in several other games, only to become the main protagonist in *Super Mario Land 3*. He then goes on to completely reinvent the mini-game genre with the excellent *WarioWare* series, while continually hassling Mario is numerous adventures, both platformers and otherwise. What a cad.

IT'S A ME! MARIO!

AS SEEN IN: Super Mario 64

15

It's easy to forget just what an impact Mario made when he appeared on Nintendo's 64-bit system. After 11 years of 2D adventures with the lovable plumber, here he was in full 3D and he looked fantastic. Simply watching Mario follow your cursor around with his eyes was a treat enough upon loading the game, but the real magic came when you realised that you could use that disembodied glove to actually pull at Mario himself, twisting him into all sorts of hilarious positions. It's the first of many unforgettable moments that would help transform *Super Mario 64* into one of the greatest platformers of all time.

"It was late 1996, and a couple of us had bought *Mario 64* on import for our N64 consoles and we challenged each other to see how fast we could beat the game. It ended up being about three weeks for me. Anyway, I'd been playing it for a few hours at a time and in the early hours, one night with lights off, I was really 'in the zone', swimming Mario through an underwater cavern and he ran out of oxygen. He had a very poignant death animation, where he spluttered and then floated limp and lifelessly towards the surface with the camera pulling away from him. It was so sad, I almost cried. I was so emotionally connected to him and his quest. It was a very upsetting and emotional moment. It reminded me of the fact that even whilst the graphics are obviously cartoony and stylised, much like Snow White and Woody from *Toy Story*, it's possible to create fictional characters with really empathy and whilst we've all seen that with animated characters in films, it was the first time I'd felt it for a game character."

ANDREW OLIVER, BLITZ GAMES

"The first time I played *Mario 64* it just felt so revolutionary – Nintendo did such a great job of making the jump to 3D. Mario's control felt amazing – you could have fun just running around, sliding and jumping. It was just the perfect game to launch the N64 with – it looked, sounded and played great."

JOHN PEGG, RARE

"It's an interesting question, and there have been so many great moments in the Mario games that choosing one of them seems arbitrary and unfair to the others. For me, the real high point was those first few moments of playing *Super Mario 64*. Entering the third dimension, enjoying the intuitive controls. Running around outside the castle, seeing it all in 3D for the first time, trying out the different kinds of jumps, birds flying from trees as you climbed them. Realising that they had got so much so right on their first attempt and that it was going to be a great game to play. I can't think of another moment like that." **STEVE ELLIS, RARE**

"The first is the snow section on *Super Mario 64*. There are penguins around and the atmosphere of that whole area is top-notch. To cap it all, there is the ice racing section in there that is really a fun break from the jumping mechanic." **STEVE WETHERILL, ODIN SOFTWARE**

MISSION MARIO

AS SEEN IN: Super Mario 64

19

Super Mario 64 was a game changer. It not only redefined platformers for years to come, but also delivered a fresh new take on Mario's 11-year-old formula. It was magical enough to simply leap through a painting and discover an exciting new world within it, but *Super Mario 64*'s unique missions left an equally memorable impact, giving structure to the game and a sense of place that hadn't been in earlier games. The core mechanics were still there, but now you were racing penguins down slides, launching yourself into the ether in search of goodies and reuniting snowmen with their missing heads. In short you were having the time of your life.

> The shock when you jump at pictures and are transformed into a new area the picture ripples as you leap though **BRIAN HEAPS**

BOWSER BY THE TAIL

AS SEEN IN: Super Mario 64

There are few moments in *Super Mario 64* — or any *Mario* game for that matter — that are as satisfying as your first encounter with Bowser. While he was always challenging in earlier games, he was never as menacing as he was in *Super Mario 64*. Being rendered in 3D not only made him imposing, but also gave a better indication of just how big the king of Koopas actually was. A further nice touch comes from the camera that shakes with every gigantic pound of Bowser's feet.

Still, the bigger they are the harder they fall and in *Super Mario 64*, Bowser falls very hard indeed. Initially he seems too powerful, thanks to his imposing size and the gigantic gouts of flame that he can spew out at will, but your 3D incarnation of Mario is super agile and before long you're able to confound the beast and get behind him.

Grabbing hold of Bowser's tail you slowly start swinging the surprised king, faster and faster, until he becomes a whirling dervish of green and yellow. "So long, dear Bowser," shouts Mario as he sends the king hurtling towards the mines that litter the stage. Four collisions later and the Kooper King is suitably cowed, leaving behind a gigantic key so Mario can continue his adventure.

> *Mario 64*. For me this was the first *Mario* game that really drew me into Mario's life perhaps because it was the first time the player actually got to feel as though there actually was a 'Mario World' somewhere in that machine.
>
> When *Mario 64* was released I think there were a lot of 'dark' and gloomy games that were becoming more and more popular, utilising 3D to create shooters. But playing *Mario 64* was a refreshing change, and showed us that games didn't have to be all *Doom* and gloom to be cool. It was such a cool game and inspired many others, myself included. I think that the feel of *Mario 64* inspired myself and a lot of the artists at Rare If you take a look at *Banjo-Kazooie* and *Diddy Kong Racing*, it's clear to see what we'd all been playing! **KEVIN BAYLISS, PLAYTONIC**

> Playing *Mario 64* for the first time wandering around the castle grounds, getting a feel for the analogue stick. Is there anyone who wasn't blown away by that? **DEATH'S HEAD**

"I played *Mario 64* in Japanese, on import before it was released in Europe. My most surprising moment was seeing someone else playing it in English some six months or so later. I was horrified how much description there was on how to find each Star – I had assumed this was some sort of story text. I had spent ages trying to find the last few stars!"
DAVID BRABEN,

THE BIGGER THEY COME...

AS SEEN IN: Super Mario 64

21

Although Shigeru Miyamoto had already dabbled with size distortion in *Super Mario Bros. 3*, it made a far bigger impact with the debut of Tiny-Huge Island. Unlike the other worlds of *Super Mario 64*, Tiny-Huge Island could be approached from two start points. One had Mario miniaturised, making the avoidance of piranha plants and goombas even more perilous, while the other turned the tables. Amazingly, despite the huge size difference, teeny weeny monsters would attack Mario with ferocious tenacity, making it even more satisfying when you mashed them underfoot with virtually no effort at all.

"I detested *Mario* when it first came out, the only *Mario* game I actually had any affinity with was *Mario 64*, I loved it, loved the look of it, loved the controls all of it. Running in 3D, Mario tilting ever so slightly as he ran, something *GTA IV* introduced to 'modern' gamers back in 2008. It was brilliant, but that's really my first and last love of things *Mario*." **STEWART GILRAY, JUST ADD WATER**

MASTERING FLUDD

AS SEEN IN: Super Mario Sunshine

It's fair to say that a genre-defining game like *Super Mario 64* would be a particularly hard act to follow – just how do you make a sequel to one of the best games of all time? If you're Nintendo, you take the game in a new direction with the use of a versatile gadget. Whether he's cleaning graffiti off the walls of Isle Delfino or blasting the plaque off the teeth of an angry eel, Mario spends most of his time in the game using FLUDD.

The water-powered gadget initially serves Mario as an eco-friendly weapon, but by the end of the game you'll have encountered different nozzles which allow him to hover, blast into the air and run at speeds that would challenge even a certain blue hedgehog. These abilities allowed us to fling Mario around Delfino Island with the kind of speed and style we'd never had access to before.

"Although I'd played *Super Mario World* and *Mario 64* to their absolute limit, *Super Mario Sunshine* was the first in the series that I wanted to explore for all its worth. It had the three-dimensional splendour of *Mario 64*, plus the design intricacies of *Super Mario World*. Wherever I took Mario, I was usually rewarded, constantly memorising cool routes through the maps, practicing for coin runs at speed or to gain access to the next secret area. I can still remember where I found my final Blue Coin; it was such a moment of triumph. When I discovered that Yoshi was in there too, I was completely in love. While *Super Mario Galaxy* showed more overtly that Nintendo could still conceive whacky concepts that are fun for all to enjoy, in *Super Mario Sunshine* it proved that it was matchless for creating impeccably produced, masterfully designed worlds that came alive in the player's hands." PAUL DAVIES, JOURNALIST

HOVER NOZZLE

■ With powerful twin jets of water, Mario can sustain mid-air flight for a few seconds. Not only does that let him cover gaps, it's also perfect for cleaning from above.

SQUIRT NOZZLE

■ A versatile attachment used for cleaning up graffiti, shooting at enemies, putting out fires and all manner of other tasks which require you to squirt water at things.

TURBO NOZZLE

■ If you've ever seen someone using a fire extinguisher to propel themselves, you'll know what's coming here – Mario uses a jetstream to sprint at high speeds.

ROCKET NOZZLE

■ If you need to reach high places and Mario's little legs won't push him far enough, one high-pressure blast of water will send you soaring into the stratosphere.

"My moment comes from *Mario Sunshine* where you're going about your merry way then Shadow Mario comes out from the ether and pinches your FLUDD just before you enter a level. I spent *ages* trying to beat that hidden level which is set in a void that exists somewhere *Mario 64* and *Sunshine*. I did finish it in the end, my palms were sweaty, my heart was beating and my GameCube controller was never the same..." DREW SLEEP, PRODUCTION EDITOR, RETRO GAMER

MEGA MUSHROOM!

AS SEEN IN: New Super Mario Bros.

Check any expectations of subtlety at the door – when Mario gets hold of a Mega Mushroom, he becomes so large that there's only one reasonable course of action. In case you hadn't guessed, that means going on an unstoppable rampage. Invincibility stars are great, but they just let you take out enemies. Mega Mario can smash through everything in his path, from enemies to scenery objects like blocks and pipes.

Of course, being Mega Mario doesn't just feel great. There are some great touches to this too – for example, if you reach the end of a stage as Mega Mario, you can knock down the flagpole. Mario then looks back at it sheepishly. Even better, you're rewarded with extra lives for smashing objects.

"My first home computer encounter with *Mario* was in *Donkey Kong* on the Dragon 32, which was the first game I saw on that machine in two-colour 320x200 mode, which was hi-definition of the day. Apart from the lack of colour it behaved as the arcade original, which probably persuaded me that the Dragon 32 could do the job and led us to choose it as our second platform to code on after the ZX Spectrum. My Dragon 32 conversions of Steve Turner's first three games were all done in that graphics mode.

So you could say that Mario himself put me on the course to programming, without either of us knowing it."
ANDREW BRAYBROOK, GRAFTGOLD

OOPS UPSIDE YOUR HEAD

AS SEEN IN: Super Mario Galaxy

24

Having accidentally mastered the 3D platformer on its first attempt, Nintendo left itself a mountain to climb with each and every follow-up to *Super Mario 64*. Initial fears that *Galaxy* might fall into that oh-so-common Wii trap of abusing gimmicky controls and suffering as a result were allayed upon finally taking the game for a spin, where we discovered a totally different kind of gimmick – one that actually worked. Jumping mechanics are so integral to the *Mario* experience that relearning how these functioned in full 3D space when each planetoid had its own gravitational pull made for a stellar experience that could keep even platforming veterans on their toes.

"Wind the clock back to 2010 and I'll be totally engrossed in *Super Mario Galaxy*, but this time I'm watching in amazement as my young son somehow masters using the Wiimote and Nunchuk and solving the puzzles in double quick time, yet he's to young to be able to read the screen menus and messages, so I say them out loud for him. Real father and son bonding stuff! He played it for months and months, and still does occasionally."

ARCHER MACLEAN, AWESOME STUDIOS

MULTIPLAYER MADNESS

AS SEEN IN: New Super Mario Bros. Wii

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Although previous *Mario* games had dabbled with multiplayer shenanigans, it wasn't until 2009 that Nintendo really perfected the formulae, allowing four friends to work together to complete the cleverly designed levels that Nintendo had crafted. Despite the cooperative-based gameplay there were still time for arguments as characters were unable to share each other's spaces, meaning it was all too possible to accidentally knock a friend off a ledge to their doom. Did we say accidentally? Sorry, we meant purposely.

The inclusion of additional players does highlight the fact that later *Mario* games seem to be rarely designed around them, but anyone who has chased another player around the screen so that they can knock them into a whole in the bottom of the screen is highly unlikely to care.

"Early on in *Super Mario Galaxy*'s Good Egg Galaxy, there's a capsule-shaped planet with a glass exterior. The genius of the game's design became clear when I smashed my way inside to find a 2D challenge on a rotating stage, complete with gravity shifts. Up until that point, I'd thought it was just another good 3D *Mario* game – afterwards, I realised it was simply revolutionary."

NICK THORPE, SENIOR STAFF WRITER, RETRO GAMER

"They're all great! I love them all. But actually, the very first game is the most important to me. I played it at a time when I was still unemployed, before starting out somewhere. Playing this, I realised for the first time, 'Oh, there is a game industry. This is something I could realise being creative, and actually conceive works of art.' *Super Mario Bros.* would be my favourite because it actually pushed me into this industry. Otherwise, possibly, without this I wouldn't even have ended up there." **KEIJI INAFUNE, CAPCOM**

WHO NEEDS BOWSER?

AS SEEN IN: Super Mario Galaxy 2

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While it seemingly made use of a lot of the same assets as the original and didn't mess with the near-perfect formula too much, *Galaxy 2* still found ways to innovate and impress, to the point where some would cite it as the better of the two games. It clearly has spectacle on its side – returning players wouldn't get the same sense of freshness from another set of relatively simple levels like those of the first game – and this comes to the fore in some of the incredible boss fights. Mario bosses don't tend to be all that great but the Gobblegut showdown is wonderful, the spherical battlefield evolving as he chews through the planet as the fight draws on.

MARIO THROUGH THE AGES

- SUPER MARIO BROS.
- SUPER MARIO BROS. 2
- SUPER MARIO BROS. 3
- SUPER MARIO LAND
- SUPER MARIO WORLD
- SUPER MARIO LAND 2
- SUPER MARIO 64
- SUPER MARIO SUNSHINE
- NEW SUPER MARIO BROS.
- SUPER MARIO GALAXY
- NEW SUPER MARIO BROS. Wi
- SUPER MARIO GALAXY 2
- SUPER MARIO 3D LAND
- NEW SUPER MARIO BROS. 2
- NEW SUPER MARIO BROS. U
- SUPER MARIO 3D WORLD
- SUPER MARIO MAKER

AN ALL-NEW PERSPECTIVE

AS SEEN IN: Super Mario 3D Land

Having miraculously mastered the art of 3D level design on its first attempt, Nintendo never had us worried about that aspect of *3D Land*. But the 3DS' primary gimmick did, mainly because we remember the sea of early DS releases that were ruined by attempts to utilize novelty hardware features. To this day, though, *3D Land* remains the only game that uses the handheld's illusion of depth on a gameplay level, with puzzle rooms playing cunning tricks with 3D space. Even elsewhere, though, 3D offered some great moments, really giving a sense of height and depth to moments like this death-defying drop.

"My favorite moment, honestly, is the fun we all had in the arcades playing *Donkey Kong*, and how we all helped the heroic little plumber outsmart the formerly-eponymous monkey and steal the brand. My second favorite moment is every time I hear a sound effect that I know had its origin with *Mario*. *Mario* forever!"

TRIP HAWKINS, ELECTRONIC ARTS

THE CRAZY COIN BOOST

AS SEEN IN: New Super Mario Bros. U

Mario games have long been the careful, considered other side of the coin to Sonic's high-speed hijinks, but a new mode would look to address this long-standing difference in opinion between the two rivals. Boost Rush was the result of Mario realizing that maybe he *did* have to go fast after all, auto-scrolling stages speeding up the more you lined your pockets with gold. It felt a little like a mobile title – auto-runners are everywhere these days – but with the polish and production values you'd expect from Nintendo, proving that the developer wasn't nearly as out of touch with modern gaming as its critics might claim.

SO MANY COINS... SO LITTLE TIME...

AS SEEN IN: New Super Mario Bros. 2

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The fact that you can make it through most classic *Mario* stages without collecting more than a few coins would suggest to us that the mascot wasn't in it for the money, but *New Super Mario Bros. 2* flipped that notion on its head, and as a result made us look at Mario's currency in a whole new light. Here, the very point of the game is to rack up an insane balance and in a single level, you could easily bag as many coins as you likely would in an entire playthrough of one of the older games. There's something completely mesmerising about seeing levels awash with those dinky yellow coins and it became even more enticing when you were playing with a second player.

Suddenly a brand new game mechanic introduced a highly competitive element to the series that was not only incredibly fun, but also helped hide the fact that Nintendo's 3DS-based sequel wasn't quite as impressive as the excellent handheld platformer that had proceeded it. The novelty of collecting all those coins was somewhat short-lived, it must by said, but the initial excitement of seeing money *everywhere* was still a welcome change of pace for the series and one of the highlights of Nintendo's portable sequel.

THE HELPFUL GHOSTS

AS SEEN IN: Super Mario 3D World

30

As games grow increasingly complex, their secrets naturally get harder and harder to find. But in its hugely entertaining ghost replay feature, this Wii U stunner found as strong an answer to this issue as Wonder Guide was for that of rising difficulty. As you explore, you'll see the routes taken by other players happening around you. Some may lead you to hidden items or areas, others to shortcuts that help shave precious seconds off your best level times and, even more basic, it allowed for oddly addictive asynchronous multiplayer as you race against others who may not even be online.

"I've always enjoyed the *Mario* games, but it's the latest one which has become my favourite. My family absolutely loves cats, and *Super Mario 3D World*'s Cat Suit ensured that both my children and wife would participate in multiplayer games. Initially the Cat Suit comes across as a bit of a gimmick, but you soon realise just how versatile it is. It begs you to explore the world as it allows you to cling to and climb walls that you otherwise couldn't access, opening up the seemingly linear levels and proving just how clever Nintendo's design still is. It might be a little chaotic playing Mario games multiplayer, but there's no denying that they're also a lot of fun."

DARRAN JONES, EDITOR, RETRO GAMER

WHAT NEXT?

Super Mario Odssey is the latest game in the *Super Mario* series and it's a rather interesting one, as it allows you to possess enemies with the help of Mario's new friend, Cappy. Released to critical acclaim on the Nintendo Switch, it's perfect proof that when it comes to platformers, the legendary Mario is pretty much unstoppable.

RETROINSPECTION: GAME & WATCH

AT THE DAWN OF THE EIGHTIES NINTENDO WAS ONLY JUST STARTING TO EXPLORE THE INDUSTRY IT WOULD EVENTUALLY DOMINATE. LONG BEFORE THE NES, MARIO, AND ZELDA THERE WAS THE GAME & WATCH – THE SERIES OF HANDHELD TITLES THAT WOULD ULTIMATELY SIRE THE ALL-CONQUERING GAME BOY. DAMIEN MCFERRAN EXPLORES THE HISTORY OF POCKET-SIZE GAMING

Year released: 1980 - 1991

Original price: Approx $30

Buy it now for: £5+ (depending on model)

Why the Game & Watch range was great... The range offered true portability for the first time in the history of the videogame industry. The units were small, durable and the cell batteries lasted for ages before they needed to be replaced. Forced to work within the confines of the crude LCD technology, Nintendo succeeded in crafting some truly mesmerising gaming experiences, the vast majority of which stand up to scrutiny even by today's standards

When you look back on the history of videogames it's not uncommon to discover amusing anecdotes regarding defining moments in the industry. For example, rumour has it that Namco's *Pac-Man* was conceived when the game's creator Toru Iwatani glanced at a pizza with one slice missing, and there's an equally famous tale that suggests that Nintendo's renowned Mario was named after the landlord of the company's American offices, who happened to bear an uncanny resemblance to the Italian plumber. Whether or not these stories are actually true is a moot point but it's impossible to deny that they lend our hobby a sense of wonderment and it's remarkable to think that these toweringly popular ideas can be born from such humble beginnings.

The genesis of Nintendo's Game & Watch series is recounted in an equally whimsical tale. According to legend, Nintendo engineer Gunpei Yokoi came up with the concept after observing a bored Japanese salary man absent-mindedly fingering his pocket calculator while travelling to work. If the story is true then this seemingly innocuous encounter ultimately gave birth to portable videogaming as we know it today. Yokoi was tragically killed in a roadside incident in 1997 and although he would gain worldwide fame and adoration as the creator of the Game Boy, many view his earlier LCD legacy with the most fondness.

Yokoi started working at Nintendo in 1965, assuming the modest role of an assembly line engineer. The Nintendo of that era was a very different beast to the one that we know today; the main focus of its business was 'Hanafuda' playing cards. According to yet another of those irresistible yarns, Yokoi created an extendable arm in order to amuse himself during the long working hours and this device happened to catch the eye of company president Hiroshi Yamauchi, who was inspecting the factory at the time. Yamauchi was on the lookout for a product that could turn around Nintendo's fortunes; the playing card market had slumped badly in the mid-Sixties and the president had tried all manner of different tactics to turn a profit.

Yamauchi was instantly intrigued and tasked the young Yokoi with turning his extendable arm into a bestselling product. It was a risky move that was by no means guaranteed to succeed, but the re-christened 'Ultrahand' proved to be a runaway success, shifting more than 1.2 million units worldwide and would prove to be the first in a long line of popular toys to spring from the mind of Nintendo's new star employee. These novel creations would eventually earn Yokoi his very own department within the company, known as Research and Development 1 Group.

Towards the end of the Seventies, Nintendo started to disregard toys in favour of videogames and it was during this time that Yokoi had his aforementioned chance meeting with the bored businessman and his calculator. It was ideal timing; LCD technology was cheap and videogames were big business. However, up to this point quality gaming was restricted to either the arcade or the home. Several companies had already produced portable games, but they were usually rudimentary LED-based units with uninspiring gameplay and were too bulky to be deemed truly mobile. Yokoi watched the efforts of companies like Mattel and Tomy with interest; he had his own ideas for the portable gaming industry.

INSTANT EXPERT

The official mascot of the range is Mr Game & Watch, who famously appeared in *Super Smash Bros Brawl* on the Wii.

Sixty G&W games were released in total, although only 59 of those were ever on sale to the public – the 60th game was limited to 10,000 units and given away free as a prize.

The Silver game *Helmet* was renamed *Headache* in the UK because distributor CGL believed people would be offended by the sexual connotation of the original title.

Micro Vs Boxing was re-branded as *Punch Out!* in America to tie-in with the popular arcade game.

Game & Watch titles make cameo appearances in the *WarioWare* series.

In the late-Nineties several classic Game & Watch titles were re-released as part of the Mini Classics key ring range.

Some Game & Watch titles included battery cover stickers which could be applied to prevent babies from removing the battery cover and swallowing the batteries contained within.

Some Spitball Sparkey units were produced with white casing as opposed to the usual silver – understandably, these are worth a few bob these days.

The game Egg is identical to *Mickey Mouse* in terms of gameplay – it's rumoured that it was produced for release in territories where Nintendo's licensing deal with Disney didn't exist.

Just like regular games, some of the Game & Watch titles have cheat codes that allow you to start on later levels.

RETROINSPECTION: GAME & WATCH

It was during the development of the Game & Watch that Yokoi laid down principles of hardware design that would echo through Nintendo's history right up to the present day, dubbing it 'Lateral Thinking of Withered Technology'. Freelance journalist and all-round Yokoi admirer Lara Crigger explains: "Essentially, Lateral Thinking of Withered Technology boils down to using mature technology in novel or radical applications. At the time of the invention of the Game & Watch, LCD technology was everywhere. It was a well-understood process and because prices for individual components had dropped so much, integrating LCD into a product was relatively inexpensive. Some people at Nintendo wanted to use fancier technology in the Game & Watch, technology that would have reduced battery life and raised costs, but Yokoi insisted that affordability was key and that the player cared more about fun gameplay over flashy technology." Yokoi would later apply this philosophy to the production of the Game Boy, and Nintendo has taken a similar stance with recent hits such as the DS and Wii.

Yokoi faced a tricky conundrum when it came to deciding upon the best interface for his new product. He quickly decided that a conventional joystick would impede on the Game & Watch's portability, so he began looking for solutions that would take up less space. Many of the early machines simply possessed a couple of buttons with which to control the game, usually corresponding to simple actions such as moving left and right or jumping, but 1982's *Donkey Kong Jr* changed all that. Although it was actually four buttons arranged in a cross shape, with each one corresponding to up, down, left and right, it would later evolve into what we now know as the direction pad, or 'D-pad' for short. This was a development of truly seismic proportions, as Crigger acknowledges: "The entire portable games industry wouldn't exist if it weren't for the invention of the D-pad. It was that first, necessary invention that made all portable gaming devices possible. It comes down to basic ergonomics; the D-pad eliminates the need for a joystick, thus streamlining the controller interface and facilitating portability. A controller with a D-pad simply takes up less physical space." Compared to other methods of control available at the time, this new interface presented undeniable advantages. "The D-pad is a more intuitive method of controlling gameplay, compared to the alternatives," continues Crigger. "Look at a joystick: to manipulate it, you have to use the sides of your thumbs and fingers – or in some cases, your palm or whole hand. That takes more manual effort than just pushing buttons with a thumb tip."

There was also an element of convergence with this new range of handhelds. Although it seems like a trifling addition in today's technologically advanced world, the inclusion of a digital clock in each game (therefore giving rise to the name 'Game & Watch') was a major selling point back in the early-Eighties. Although LCD watches were commonly available they were outside the reach of most children, so the Game & Watch was a useful device as well as a source of entertainment. A handy alarm feature was also available – possibly to wake up the owner after a particularly heavy night of LCD-gaming.

Arguably the most vital piece of the hardware puzzle was the choice of power source that would bring these tiny games to life. Yokoi opted for 'button cell' batteries, previously seen in digital watches and calculators. Not only were these cheap to replace, they were also small and therefore fitted snugly within the machines without breaking the sleek, straight lines of the casing or adding any additional weight that might hinder portability. Yokoi's desire to ensure his products would be inexpensive to run and not require a constant supply of fresh batteries played a vital part in ensuring the success of the range – a fact he was sure to remember when he came to create the Game Boy almost a decade later.

But there was much more to the appeal of the Game & Watch range than just mere interface design and long-lasting power. Because LCD technology granted the developers a very limited amount of on-screen real estate in which to place their action-packed gaming experiences, the games themselves tended to be extremely focused. "There was little room for design screw-ups," says Crigger. "If the game mechanic wasn't simple enough, or addictive enough, then the game failed. It couldn't hide behind flashy FMVs or intricate storylines. It was just player and mechanic, and that's it." The experiences offered by the Game & Watch may seem primitive by today's standards, but that very same simplicity was a major factor in the ultimate success of the lineage and it's a testament to the concept that the games are still eminently playable even today. "They're appealing for the very same reason that *Tetris* will never really die: simplicity is addictive," comments Crigger. "People love activities that are easy to learn, but hard to master."

The first Game & Watch title was the simplistic *Ball*. Released in 1980 this endearingly basic game showed only faint glimmers of the kind of depth later Game & Watch titles would possess; the screen was completely blank, the gameplay was unsophisticated and the LCD characters somewhat crude – clearly a case of the developer finding its feet with new technology. Sales weren't astonishing but the

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NOW TAKE YOUR FAVORITE NINTENDO TITLES WITH YOU ANYWHERE!!!!!!!
NINTENDO GAME & WATCH LETS YOU PLAY DONKEY KONG, OR SUPER MARIO BROS. IN A CAR, A BUS, OR EVEN IN A TREE WITH YOUR FRIENDS!!!
POCKETSIZE
FIRE
VERMIN
HELMET
SUPER MARIO BROS.

» By the time the Game & Watch Tabletop series appeared, Nintendo was being a bit more hands-on with worldwide distribution, as this advert proves.

» Light-hearted adverts such as these appeared in UK comics like *Eagle*.

» The man himself – Gunpei Yokoi created the Game Boy, but sadly died in 1997.

» LCD will never die: Mr Game & Watch kicking arse in *Super Smash Bros Brawl*.

COUNTERFEIT FIX

As is the case when any product becomes valuable, the Game & Watch market is highly susceptible to fakes. "In the last few months, we've seen a lot of counterfeit items appearing," reveals Cole. "It's mostly boxes and instructions – having a box, especially one in good condition, adds greatly to a game's value." These high-quality reproductions of original packaging have caused a serious headache for dedicated collectors. "Most collectors look for mint items and have paid great amounts of money to acquire them," explains Panayiotakis. "Finding original Game & Watch boxes intact isn't an easy task, but if someone started selling perfect counterfeit boxes or games, your collection would be instantly worth one twentieth of what you had paid for it because the market would be flooded with perfect items." However, at this stage the problem is isolated to boxes and instructions. "To my knowledge, nobody has been able to produce a fake game successfully – yet," says Cole. If fake machines were to appear, Panayiotakis is in no doubt as to what effect it would have on the collecting community. "Perfect counterfeit items would make the task of collecting authentic games very difficult," he says. "I don't think there would be any point in collecting the games after that, if such an event ever occurs."

FROM A TO B

Mindful that each Game & Watch could only offer one game due to the limiting nature of the LCD display, Nintendo decided to include two different difficulty settings for each machine, thereby increasing the long-term appeal of each title. Known as 'Game A' and 'Game B', the player had to press the corresponding button before starting play to decide which challenge they wished to face. Game B was usually faster and more demanding, but there were exceptions – *Flagman*, for example, had two different games and the 'B' variant is generally seen as the more enjoyable. Multi Screen release *Squish* is another and in *Judge*, Game B is actually a two-player version of 'A'. Although it was a neat concept and added hours of playtime to each release, not all titles carried this feature – *Climber* and *Super Mario Bros* do not possess Game B options.

GAME BOY GALLERY

Should splashing out loads of cash on original Game & Watches not appeal to you then you can always buy one of the excellent compilation packages that were released for Nintendo's Game Boy machines. The series debuted in 1994 (in Europe and Australia) with *Game Boy Gallery*. The sequel, *Game & Watch Gallery*, followed in 1997 and was granted a global release. The third and fourth games were released on the Game Boy Color in 1998 and 1999 respectively, and a Game Boy Advance instalment hit shelves in 2002. In many cases the games in these collections were visually upgraded variants of the originals. More recently Nintendo has released the *Game & Watch Collection* for the DS (only to members of Japan's Club Nintendo service, but copies are easy to find on eBay), which replicates three Multi Screen titles – *Oil Panic*, *Green House* and *Donkey Kong*. Dig out **RG** 30 for our review.

COMMUNITY GAME & WATCH SITES TO WATCH

Mike's Nintendo Game & Watch Forum

mpanayiotakis.proboards.com

Mike Panayiotakis's excellent forum is a vibrant hub of Game & Watch activity and is the ideal place to learn about the complexities of starting a collection. A must-have resource for prospective fans with lots of fantastic images.

Game & Watch.com

www.gameandwatch.com

Another well-realised site devoted to Nintendo's Game & Watch, it recently celebrated its fifth birthday. It's easy to see why the site has been around for so long – it has bags of content and great design. Worth a visit should you crave to amass even more G&W knowledge.

Game & Watch

nintendo.co.jp/ds/dsiware/game_and_watch/index

Amazingly, Nintendo still has an official Game & Watch website. It's admittedly all in Japanese and primarily focuses on all the games that are currently available for download on its varius eShops, but it does show how the games play.

game seemed to strike a chord with consumers and this was enough to persuade Nintendo that it was worth creating further titles. *Ball* marked the first release of the 'Silver' series of Game & Watch titles, so called because of the colour of the metallic faceplate. The next step was the 'Gold' series, which was fundamentally the same machine but with a different faceplate and a smattering of static colour on screen to make the games seem a little more vibrant. This range spawned a mere three titles before it was superseded by the 'Wide Screen' variant in mid-1981. As the name suggests, the display was a whopping 30 per cent larger than the one seen in the Silver and Gold range.

The limitations of the LCD display meant that Nintendo was always looking for ways to innovate, and the next logical step was to add another screen to double the amount of gameplay each title could potentially offer. The Multi Screen series kicked off with *Oil Panic* in 1982, but it was the release of *Donkey Kong* that really cemented the success of the range. Easily the biggest selling of all the Game & Watch titles up to that point, *Donkey Kong* was a startlingly faithful representation of the arcade smash hit. Iconic in design, the Multi Screen range would influence future Nintendo design choices. "It's no secret that the Nintendo DS was based on the original Multi Screen Game & Watch design and that just shows how far ahead of its time this idea was," comments hardcore collector Mike Panayiotakis.

Released in 1983, the Tabletop series was something of a departure for the norm. It sacrificed portability for more impressive colour visuals and ran off bulky 'C' batteries. Sales of this machine were steady but nowhere near as impressive as its Wide Screen and Multi Screen cousins, and therefore only four Tabletop titles were ever produced. A refinement of the technology resulted in the more mobile 'Panorama' series a few months later, which used a foldout mirror to enhance the vacuum fluorescent display. Nintendo's seemingly insatiable desire for colour gaming culminated in 1984's ill-advised 'Supercolor' range, which was in fact just a standard LCD display with a colour overlay. Only two games were ever produced, making this the least successful entry in the Game & Watch canon. Sensing that gaming was also a social pastime, Nintendo decided to publish the 'Micro Vs' series in the same year, which offered simultaneous two-player action thanks to a pair of small detachable controllers.

Also in 1984, the final hardware revision was released in the shape of the legendary 'Crystal Screen' machines. These were more traditional games in keeping with the Wide Screen style, but they possessed a transparent LCD display. Sadly these screens were highly susceptible to damage. Marketed as a luxury item, the range didn't quite achieve the same kind of fame as the more traditional Wide Screen games, which by this point had been relaunched under the snappy title of 'New Wide Screen'.

Although it's strange to think it now, Nintendo didn't really command much of a presence outside Japan at the time, so worldwide distribution of early Game & Watch machines was handled by other companies. These included Mega (USA), CGL (UK), Ji21 (France), Videopoche (Belgium) and Futuretronics (Australia). Many of these firms would re-package the devices and in some cases remove the Nintendo logo altogether, instead replacing it with their own.

By the mid-Eighties Nintendo had released the NES home console and the Game & Watch range took a back-seat role. As the decade drew to a close the seemingly vast reserves of innovation began to run dry, but it was ultimately Yokoi himself that would deal the deathblow to his beloved pocket-sized offspring. *Zelda*, the penultimate release in the range, hit shelves in 1989 – the same year as Yokoi's newest pet project: the Game Boy. It was instantly obvious that the writing was on the wall for the videogame and clock combo. The very last entry in the series was a

» Believe it or not, but these are actual erasers of various Game & Watch titles. Perfectly formed, it's almost a shame to actually use them for their actual purpose.

» Yokoi's Ultrahand – the toy that established an empire.

» Time Out was another company that distributed Game & Watch machines in the US – note the lack of Nintendo branding on the machines.

DIFFERENT VERSIONS

Silver Range
The one that started it all. The Silver range consisted of five different titles and lacked the colourful screen overlays that would be seen in later titles. Five games were produced in low quantities and as a result they're pretty rare these days.

Multi Screen
Pre-dating the DS by over 20 years, the Multi Screen effectively gave twice as much action by adding an additional LCD display. Because the game could be closed when not in use, it made it even more durable. A smaller version that opened sideways was also released.

Tabletop
Bulky, power-hungry and practically un-portable, the Tabletop range was something of a backwards step, recalling memories of the unwieldy electronic games of the late-Seventies. Unsurprisingly, the range didn't sell as well as the traditional G&W machines, although in terms of gameplay these are still wonderful machines to own.

Micro Vs
Providing much-needed multiplayer action, the Micro Vs range featured two small joypads that could be stored within the system when not in use. The thin screens were less welcome, however, and the series was not as successful as might have been expected.

loving homage to the game that started it all – 1991's *Mario The Juggler* recycled the gameplay from *Ball* but showcased gorgeous screen artwork. It was the end of an era, but with the new-fangled Nintendo wooing gamers the world over, few seemed to mourn its passing.

Given the durable nature of the Game & Watch range, the appealing design of the casing and the desirable Nintendo branding, it's little surprise that a truly hardcore collecting scene has risen up over the past few years. The reasons for this differ depending on which collector you happen to speak with. "For most of today's collectors, it's simply nostalgia," comments British Game & Watch fanatic Andy Cole. "People now find themselves with the resources to buy the games they lusted after in their childhood, which their meagre pocket money couldn't buy them." Others do it more for the love of the brand, such as Dutch collector Martin Van Spanje. "I have always loved Nintendo games and the Game & Watch series are basically where it all started for that company," he says. "I want to see them all, and find out how Nintendo made progress."

Whatever the reason, amassing all 60 of these unique devices isn't an easy (or cheap) task.

"Even though many of the games can be found for a fiver, you need lots of cash if you want all 60 of them," explains Van Spanje. "My collection has already cost me around 3,600 euros, and I'm still missing four of the more expensive games. Also, I don't collect mint condition games and I don't care about the packaging and user manuals. If you want all of that as well, you need to at least double your piggy bank." Indeed, boxed specimens in pristine condition can fetch prices well into triple figures and the elusive '60th' game – a special edition of *Super Mario Bros* produced in 1987 – is very hard to locate. "This is the Holy Grail of Game & Watches and remained almost completely unknown in collector's circles for over a decade," explains Cole.

"It was produced as a prize for a competition for owners of a NES F1 racing game. Ten thousand were given away in Japan only, making this by far the rarest Game & Watch title. Only in the early 21st Century, when collectors in Japan spread the word, did this game become widely recognised. Because of its rarity, its value is higher than that of any other game in the range – expect to pay about £300 just for an unboxed specimen."

Another aspect that makes the range so appealing today is the durability of the games themselves. "As can be seen by the number appearing in auctions and in collections, they are still going strong, thanks mostly to their extremely simple electronics," comments Cole. "They are probably more reliable than a games console of today; I expect that they'll still be around long after the last PS3 is in landfill." Van Spanje expands on this: "The games were intended for kids and fit inside your pocket. If you keep them safe, they will last for ever even if you play them regularly."

Has our intrepid gang of Game & Watch experts got any advice for prospective collectors? "A potential collector should first set a target," advises Panayiotakis. "There are many things to collect and buying everything isn't an option unless you have unlimited money. Do you wish to collect boxed games? Do you wish to get special versions of the games? Do you wish to get all 60 games? You need to focus on specific items and create a list of things you wish to collect." Cole gives similar guidance: "The answer I always give to this question is to go slowly, as it's possible to get a complete collection of every title in as little as a month or two if you have the money, but where's the fun in that? Decide on a goal before you start. For example, decide if you want loose or boxed games, special or regular editions, then stick to your goal and be patient to wait for the right games to come along. My collection took me about five years to complete but I got some extremely good bargains and that is more satisfying than blowing a few grand all in one go."

Special thanks to Andy Cole for providing exclusive hardware photography for this feature and thanks also to Justyn Chan for additional help.

Gonge Ale

The Complete History of Donkey Kong Country

Donkey Kong Country stunned SNES owners and launched a brand new franchise. We take a look back at the history behind Nintendo's popular platform series, and speak to the people responsible for Donkey Kong's success

It seems strange to begin this tale on the subject of fighting games, but, weirdly enough, this is where *Donkey Kong Country*'s origins can be traced. In the early Nineties the gaming world was going a bit mental over fighting games, a trend largely spurred on by the popularity and competition of two games in particular: Capcom's insanely popular *Street Fighter II* and Midway's censor-baiting gore fest, *Mortal Kombat*. While *Street Fighter II* was unquestionably the more seminal and better game, *Mortal Kombat*'s popularity and attention-grabbing digitised visuals brought about an interesting trend in the way many game studios began looking at graphics in 2D videogames. While games making use of digitised sprites had existed before *Mortal Kombat*, the game's arcade and console success made the style attractive, and some gamers and developers saw a movement away from colourful pixel-built sprites as where 2D games would be heading. But there was another trend that occurred at this time: many software houses outside Japan were also beginning to create graphics that were surpassing those being produced inside, particularly when it came to 3D graphics.

Rare was a developer known for its technical flair as much as its creativity. The Stamper brothers had a history of experimenting and toying with new technology and graphical techniques in their games, and, as legend tells it, in 1993 Tony Harman, then development manager at Nintendo of America, paid a visit to the studio and was shown some proprietary 3D technology that the brothers were working on. Still in its very early stages, the demonstration showed a simple 3D wireframe boxer rendered using a 3D modelling process that would later become known as ACM (Advanced Computer Modelling). Seeing the potential in the technology, Harman immediately contacted Nintendo in Japan and, armed with the backing of Nintendo top brass Shigeru Miyamoto and Genyo Takeda, persuaded its president Hiroshi Yamauchi to invest in a game that would make use of the technology.

At this time, *Donkey Kong*'s standing at Nintendo had taken a back seat. Cast in the shadow of NES stablemates Mario and Link, it seemed, ostensibly, like there was a sense of dispassion by Nintendo towards the character: following his arcade career, the ape had been given a handful of small appearances inside a handful of Nintendo games. But it was for this reason that DK was seen by Nintendo as the perfect candidate for this innovative new 3D project: the fact that the ape had fallen out of public consciousness, and had little in the way of a story – save that he was owned by Mario, maltreated by Mario, and later had a son… not by Mario – gave Nintendo the perfect opportunity to reinvent the character and release him back into the wild.

As chance would have it, another key relationship in this story had also begun forming in the background: this one between Nintendo and Silicon Graphics, Inc (SGI). Founded by James H Clark and Abbey Silverstone, SGI was set up to offer high-performance computer hardware and software solutions, and was steadily making inroads into the entertainment industry through special effects in movies such as *Jurassic Park* and *Terminator 2*. In the early Nineties, SGI was also looking at games and had been working behind the scenes on some new proprietary technology for use in games hardware, called Reality Immersion Technology. After a number of unsuccessful pitches to various developers, including Sega of America, SGI eventually found a partner in Nintendo, and the videogame giant consequently aligned itself with SGI, as well as MIPS technology, for the development of its next console, the N64, which at that time went by the development name of Project Reality. Both Rare and Nintendo invested in SGI technology, and millions of dollars worth of state-of-the-art Silicon Graphics super computers and workstations were delivered to the Twycross studio. Intended to be put to use on developing games for Project Reality, which they later were, the technology, while extremely difficult to convert to 16-bit, was nevertheless to be initially utilised for *Donkey Kong Country*.

While Rare and Nintendo's developer/publisher relationship spanned as far back as 1987, with the release of *Slalom* – the studio's first game for the Nintendo Entertainment System – Nintendo's handing over of *Donkey Kong* to Rare can be seen as a defining moment in the relationship between Japanese and Western game developers. Before then Nintendo had only ever entrusted its intellectual property to a handful of proven developers, and none were ever allowed to put any kind of indelible stamp onto one of its already established characters. Indeed, *DKC* would mark the biggest videogame collaboration ever between Nintendo and an external studio. It was a fact not lost on the Stampers, who quickly assigned a team of 12 people to work on the game, the biggest Rare had ever dedicated to a single project. With the team facing a tight deadline, as well as trying to get to grips with the new ACM

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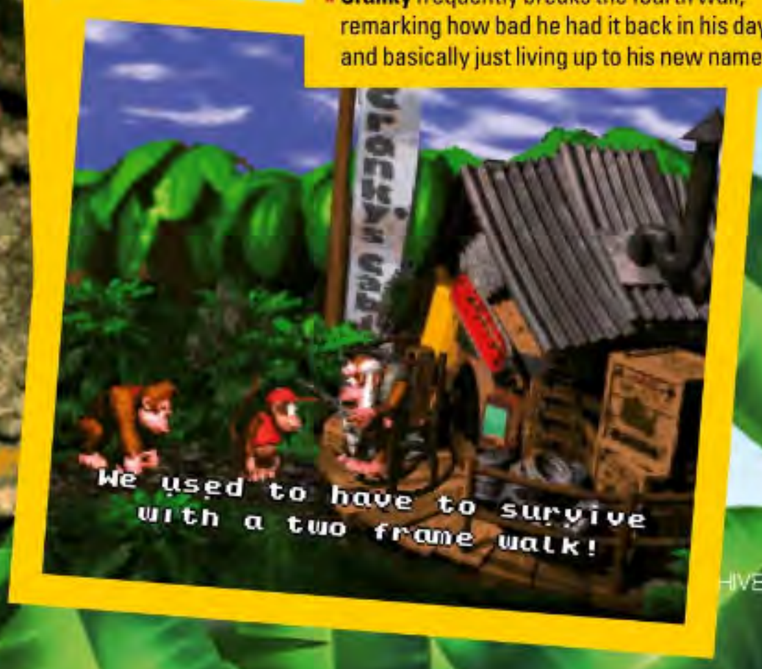


» **Cranky** frequently breaks the fourth wall, remarking how bad he had it back in his day and basically just living up to his new name.

Family In The Tree

Donkey Kong Jr

■ **FIRST APPEARANCE:** DONKEY KONG JR

Depending on who it is you speak to and on which day of the week, Donkey Kong Jr did make it into the *Donkey Kong Country* series. Both companies have come out and said that *DKC*'s DK is, in fact, the grown-up son of the original Kong, Cranky. And *Donkey Kong 64* supports this assessment too. In other games, however, DK is referred to as Cranky's grandson. So we're confused.

Donkey Kong

■ **FIRST APPEARANCE:** DONKEY KONG COUNTRY

The 16-bit generation brought a new generation of Donkey Kong. Sporting a trendy new tie, he would only appear in two of the three main *Donkey Kong Country* games. While there's still some confusion over the character's relationship with Cranky, he's definitely not the original Kong.

Tiny Kong

■ **FIRST APPEARANCE:** DONKEY KONG 64

Tiny is the smallest member of the family. Sister to Dixie and cousin to Chunky and Kiddy Kong, Tiny in *DK64* could teleport and shrink in size. Tiny was one of the additional DK characters included in *DK Racing DS* and was confirmed to appear in *Donkey Kong Racing* before it got canned.

Cranky Kong

■ **FIRST APPEARANCE:** DONKEY KONG

Cranky is the first DK, the one who shot to fame in 1981 and effectively set the barrel rolling for Nintendo's dominance. Cranky appears as a grumpy, wise old ape that reluctantly offers up advice and tips to the player. He also likes to break the fourth wall, commenting about how difficult he had it back in his day.

Diddy Kong

■ **FIRST APPEARANCE:** DONKEY KONG COUNTRY

Beginning life as Donkey Kong Jr, Rare updated the character until Nintendo decided that it wanted him more in keeping with his infant look. Rare grew attached to its baseball capped hero and so reinvented him as Diddy Kong. A number of names were considered, including Diet Kong, DK Lite, Titchy Kong and Dinky Kong.

Lanky Kong

■ **FIRST APPEARANCE:** DONKEY KONG 64

Lanky is a distant cousin, which would make sense as he is, in fact, an orangutan. He's basically no legs and long arms – a physical attribute that comes into play during *Donkey Kong 64*, where he can perform a handstand to climb steep sections of levels.

Kiddy Kong

■ **FIRST APPEARANCE:** DONKEY KONG COUNTRY 3

Kiddy is the infant cousin of Dixie and younger brother of Chunky Kong. Dressed in a sky blue romper suit, Kiddy was a power character who exhibited traits of Rare's original DK and DK Jr. Like his cousin, Kiddy was also planned to make an appearance as a racer in the GC follow-up to *Diddy Kong Racing*.

Chunky Kong

■ **FIRST APPEARANCE:** DONKEY KONG 64

Chunky is the cousin of Dixie and Tiny, and elder brother of Chunky. His beefy frame and strength belie a softy at heart. Chunky can therefore be seen as the game's cowardly lion. He hates heights and shirks danger when he can. As well as *DK64*, Chunky also made a brief appearance in the GBA version of *DKC3*.

Candy Kong

■ **FIRST APPEARANCE:** DONKEY KONG COUNTRY

Candy was introduced into the series as a love interest for DK, and allowed players to save their progress by visiting her save point stalls. Candy has made a small number of appearances during the series, most notably in *DK64*, where she doled out the instruments for DK and his fellows, and in the GBA ports of the *DKC* sequels.

Wrinkly Kong

■ **FIRST APPEARANCE:** DONKEY KONG COUNTRY 2

The matriarch of the Kong family, Wrinkly is the wife of Cranky and mother of Rare's DK. Her role was normally to offer hints and advice to the player. Rare would later kill her off in *DK64*, but still allowed her to grace us with her presence by appearing as a ghost in the game.

Swanky Kong

■ **FIRST APPEARANCE:** DONKEY KONG COUNTRY 2

We're not entirely sure how Swanky fits into the family. In the *DKC* series he plays a suited game show host who asks players trivia questions about the series and rewards them with extra lives and items to use on their quest. To date, Swanky has never been a playable character.

Funky Kong

■ **FIRST APPEARANCE:** DONKEY KONG COUNTRY

In *DKC* Funky was the guy you went to if you needed a short cut to levels you'd previously visited, and in *DK64* he went all militant, donning army fatigues and administering ammo and upgrades. We're unsure how he fits within the family, so we're going to label him as Swanky's estranged third cousin.

Dixie Kong

■ **FIRST APPEARANCE:** DONKEY KONG COUNTRY 2

Dixie is Diddy's girlfriend, cousin to Kiddy and older sister of Tiny. She made her debut in *DKC2*, but took on a starring role for the third game. She has a long ponytail, which she can use as a propeller to hang in the air. She never appeared in *DK64*, but would later show up again in *Donkey Konga 2*.

» *DKC2* opted for a swashbuckling pirate theme and introduced the piggyback move, which is why many fans consider it to be the best game in the franchise.

technology, progress had to move quickly. Especially as Nintendo, whose attentions would be concentrating on Project Reality, would have to leave most of the creative and design decisions to Rare, even permitting the studio to put its own stamp on the new 3D look of the character.

"I remember Miyamoto sent us lots of sketches for *Donkey Kong Country*. He had very definite thoughts about how Donkey Kong should look," remembers *DKC* programmer Brendan Gunn. "Tim [Stamper] had designed and rendered the image and Miyamoto had very distinct ideas about little aspects of it. They got incorporated but still left Rare to put their stamp on the character."

"[Miyamoto] was admirably hands-off, actually," adds Gregg Mayles, designer, and later producer, of the *DKC* series. "If that had been my character I'd have been looking into it every day. I mean literally he handed one of his characters over to us and we changed the look of it completely."

The original sketches by Miyamoto depicted a more cartoonish and cuddly version of DK than the one that would eventually appear in the finished game. Rare's input was to make him look leaner, more athletic, dynamic and younger looking – a look to dovetail perfectly with the fresh and innovative visual style. Once this new appearance was agreed, the next job was to decide on how best to animate the character. But quickly the team realised that 'monkey see, monkey do' wasn't really going to be practical for its game.

"We used the technology to model DK and it took a seemingly indefinite amount of time to get DK to move properly. And we tried everything. We visited the zoo to film real gorillas and have him move like a real gorilla, but they're very, very slow, and we needed a character that could run fast," says Mayles. "We had him running like a frog and then like a rabbit, but when we put the animation in it didn't look right. We went through about 15 different versions of how DK could move. In the end we based the run animation most closely on how a horse moves."

Considering *Donkey Kong*'s platform game roots and the popularity of the genre at the time, it came as no surprise when the brief that came down from Nintendo was to make *DKC* a side-scrolling platformer. But Mayles reveals that there may have been another, slightly more competitive, reason contributing to the design choice: "I believe the story, as it goes, was Nintendo had seen *Aladdin* on the Mega Drive, and the quality of the graphics and animations kind of blew everything away on the Super Nintendo. So after having seen our new graphics technology [Nintendo] said: 'We want you to make a game that's better than *Aladdin* using Donkey Kong.'"

"Rare put its own stamp on the new 3D look of the character"

In the same way that Rare had the freedom to put its mark on Donkey Kong himself, so too could it on DK's newly expanded world. Until this point, Donkey Kong's universe had consisted of girders, ladders and barrels: hardly inspirational ingredients for an innovative new 3D platform game. Rare set about creating a lush new jungle world for players to explore, with diverse and colourful stages, meticulously designed and each offering something new for players to discover. A large number of the 40 stages in the game, such as Cannon Canyon, were designed in such a way that skilled players could run and jump through them at speed, first time and as efficiently as possible. But while the ACM process had its clear advantages when it came to character modelling and animation, problems arose when using the technology to create and store backgrounds.

"The backgrounds were the bane of the project," reveals Mayles. "The memory used by this single screen was more than a whole cartridge! The only way to have large backgrounds in that era was to ensure that elements of the background repeated. We wanted a background that looked natural and didn't appear to repeat, but achieving this was far from straightforward. We used a very slow method of cutting up elements by hand and then arranging them so that they repeated, but the key was to do it so the backgrounds retained as much of the 3D-modelled quality as possible, while trying to disguise the repeated elements."

Not only did Rare introduce a younger and more agile-looking Donkey Kong to the series but also a plethora of new supporting characters too, including new enemies in the form of the Kremlings. Led by King K Rool, these crocodilian creatures are said to have been carried across from another game that Rare had in development at the time. But not all the new faces were hostile. Various animal steeds were added, designed as a clever way to imbue DK with enhanced abilities. Upon smashing crates scattered around the stages, players could release colourful sidekicks such as Enguarde the swordfish, Winky the »

» *Donkey Kong Country 3* featured neither of the first game's protagonists as playable characters.

frog and Rambi the rhinoceros. Also, the first trickles of an extended family for DK appeared too. Rare introduced Cranky Kong, an older, belligerent version of the original 1981 DK; a surfer ape named Funky Kong; and a love interest in Candy Kong. All would play supporting roles in the game, administering tips or allowing players to save their progress. The most notable addition, though, was to come in the form of DK's sidekick and nephew, Diddy Kong. Like all the new faces, Diddy was a complete creation of Rare, and actually came about as a result of an early design decision by the studio. When it was decided that the screen should look as clean and clutter-free as possible, the team agreed that introducing a tagging system would be a good way to give the player an extra hit without needing to display a health bar.

"Many assumed that DKC was running on Project Reality"

Rare then expanded the idea, imbuing both characters with their own unique traits: DK was stronger and could make short work of enemies, while Diddy was weaker but more agile. Interestingly, Rare later revealed that Diddy Kong had started life in the game as an update of Donkey Kong Jr, DK's son. However, Nintendo would only grant Rare the permission to use the character if he was made to look more like his original infant look. Feeling that its hip new character fitted perfectly into the game, a compromise was made: Rare would rename the character and Nintendo would adopt its ape.

While we're on the subject of characters, even to this day there remains an element of confusion as to the true dynastic background of Rare's DK. As we've already mentioned, the DK who appears in *DKC* isn't the original character but instead a descendant of Nintendo's ape. However, uncertainty remains as to whether the DK in the game is the grandson or the son of Cranky. But don't feel upset if you're confused, as even Rare and Nintendo forget at times. In the past both companies have come out and said that Rare's DK is the son of Cranky. For evidence of this, when a question regarding the relationship of the characters appeared on Rare's Scribes, the section of the studio's website where it answers questions about its games, the response that came back was: "As far as I know, 'our' DK is the son of Cranky, which does indeed make him the original DK Jr all grown up. So if you see Cranky referred to as DK's granddad anywhere, just cover your eyes and hum loudly until it goes away."

Conversely, all other evidence seems to point to Rare's DK being the grandson of Cranky. Not only is he referred to as such in the *DKC* games, but Solid Snake and Otacon would later corroborate the relationship in *Super Smash Bros Brawl*, during a codec chat that flashes up whenever Snake faces DK. How these two would come to know definitively is anyone's guess.

Once Rare had finished an early version of *Donkey Kong Country*, the time had come to visit Nintendo's headquarters in Kyoto and present the game. Following that meeting a few tweaks were made to the game, and *DKC* was finally ready to be formally unveiled to the world. The game was first shown off to the gaming press during the 1994 Shoshinkai (Space World) gaming expo in Japan, and attendees that year were left shocked upon seeing the dazzling 3D ACM visuals in action, as many had assumed that *Donkey Kong Country* was a next-gen project running from Project Reality tech, and they were duly stunned when the penny finally dropped.

As a result of the game's innovative 3D visuals, anticipation for it was understandably seismic. In fact, when *DKC* finally saw release in the months leading up to Christmas 1994, around the same time that Sony would launch

Mini Lands Of The Kongs

Your guide to some of Kong's best portable adventures

Donkey Kong Land

- **YEAR RELEASED:** 1995
- **SYSTEM:** GAME BOY

Donkey Kong Land is a new adventure rather than a port of the SNES game, designed with the Game Boy's limitations in mind. As such, only one hero appears on the screen at a time, and the game comprised four entirely new stages, and some new enemies too.

Donkey Kong Land 2

- **YEAR RELEASED:** 1996
- **SYSTEM:** GAME BOY

More of a conversion than a continuation of its SNES counterpart, *Donkey Kong Land 2* featured the same story as the 16-bit version, but shortened the levels to take into consideration the limitations of the host platform.

Donkey Kong Land III

- **YEAR RELEASED:** 1997
- **SYSTEM:** GAME BOY

Like previous games, *DKL III* is a loose port of the SNES game. Widely viewed as the best of the three *Land* titles, this one tweaked the plot of *DKC3*, as now Dixie and Kiddy were on a race to find the Lost World. It was also the only instalment to receive a Game Boy Color update.

its PlayStation in Japan, within six weeks of being on sale the game had sold a staggering 6 million copies, earning Nintendo around $400 million in revenue.

With its popularity further fuelled by praise from everyone who played it, the game succeeded in protracting the commercial life of the Super Nintendo and played a key role in helping Nintendo to defend its market share during the delayed release of the Nintendo 64. Owing to *DKC*'s success, the relationship between Rare and Nintendo became stronger than ever, and this would conclude with Nintendo purchasing a 25 per cent stake in the studio in 1995. This would mark the first time Nintendo ever invested in an overseas developer.

Given *DKC*'s success, Rare quickly got to work on a sequel, and *Donkey Kong Country 2: Diddy's Kong Quest* was released into stores in Christmas 1995. While initial screenshots had many thinking the sequel would be simply more of the same *Donkey Kong Country* action of before, upon playing the games fans soon realised that it was a slightly different style of game.

This time DK was out of the frame. Kidnapped by Kaptain K Rool – now demoted from king after the first game – the sequel, in some respects, could almost be described as a side-scrolling retelling of *Donkey Kong Jr*, with Diddy promoted to the main hero and having to battling through the Kremlings' pirate-themed home world, Crocodile Isle, to rescue his uncle. In addition to introducing Diddy's girlfriend Dixie to fill the gap left by DK's abduction, several new Kongs were also added to the game. This included Wrinkly Kong, wife of Cranky; and Swanky Kong, a sharp-suited game show host who asked players trivia questions in quiz show-style mini-games.

» **The** Brothers Bear were introduced in *DKC3* as a means to instil a sense of RPG progression into the normal platform action.

Donkey Kong Country 2 altered a number of elements from the original game. This time the apes could again enlist the help of various 'animal helpers', and not only were new ones added but this time the apes could oddly morph into them with the aid of special barrels – perhaps Rare had stumbled on a way to reuse some of those earlier DK animations. The tagging system was also greatly expanded, with both heroes able to perform a new piggyback move. With a quick tap of the Y button, one character could pick up the other, carry them on their back, and then throw them to attack enemies and reach otherwise inaccessible areas.

To complement this brand new feature, *DKC2* also had a far greater emphasis on exploration, now tasking players with obtaining special DK Coins through the locating of warp barrels that would whisk Diddy and Dixie to hidden stages in the game. Given the fast turnaround of the sequel, it's plausible that this mechanic might have been introduced as a measure to help save development time. Remember that, previously, many of the stages in *DKC* were designed to flow and be completed first time, a method that required meticulous design to get to work successfully. This style was far less prominent in *DKC2*, so perhaps by slowing its pace down and adding a new onus on exploration, Rare was able to design levels more efficiently.

Considering the popularity of the series at the time, and the anticipation of a sequel, *DKC2* became another hit for the Super Nintendo. And though it sold little over half the number of copies of the original, it still fell well inside the top ten bestselling games released for the console, such was the monumental success of the first game.

1996 would mark the final *DKC* release for the Super Nintendo. Released with the wordy title of *Donkey Kong Country 3: Dixie Kong's Double Trouble!*, *DKC3* retained the core platforming action that fans had become familiar with but introduced a subtle RPG twist. With both Diddy and Donkey now kidnapped by the Kremlings, it was down to Dixie to step up and take action, this time accompanied by her infant cousin, Kiddy Kong. Kiddy was designed as a giant infant gorilla dressed in a romper suit with similar »

Donkey Kong Country

- **YEAR RELEASED:** 2000
- **SYSTEM:** GBC, GBA

Released for the Game Boy Color, this version added new stages, new mini-games and also a time trial mode. The GBC version featured different music, and both allowed players to save at any point. The GBA port also came with a multiplayer mode.

Donkey Kong Country 2

- **YEAR RELEASED:** 2004
- **SYSTEM:** GBA

This is another decent conversion, and while the visual fidelity is sacrificed to squeeze the game onto the handheld, Rare at least tried to compensate fans by packing this portable iteration with new mini-games, as well as Diddy's Dash: a multiplayer time trial mode.

Donkey Kong Country 3

- **YEAR RELEASED:** 2005
- **SYSTEM:** GBA

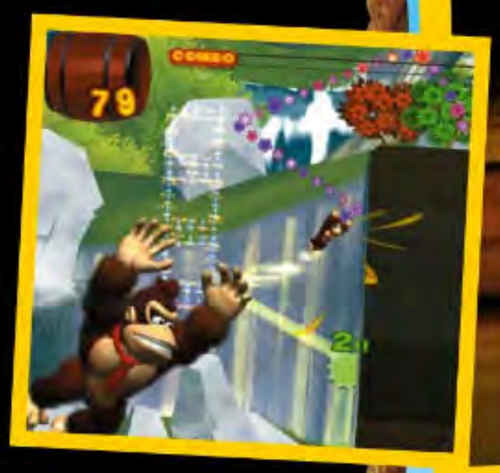
DKC3 was a faithful conversion. This time Rare gave its port a new soundtrack, new mini-games, a cheat menu, a new world to explore and a new boss to fight. This is widely regarded as being the best of the *DKC* GBA ports.

The DKC Spin-offs

Donkey Konga

■ **DEVELOPER:** NAMCO
■ **YEAR RELEASED:** 2003

Developed by Namco and comprising three games – the third was only released in Japan – *Donkey Konga* was Nintendo's stab at the rhythm-action genre. Played using a GameCube pad that was spliced with a plastic set of bongos, players got to bang them in time to the beat of cheesy pop songs and familiar Nintendo game music.



Donkey Kong Jungle Beat

■ **YEAR RELEASED:** 2004

In a bid to eke further use out of the Bongo peripheral, Nintendo came up with one of the most surprisingly brilliant platform games on the GameCube. This wonderfully conceived on-rails platform score-attack game saw players steering Kong using the drum peripheral to reach the end of each stage with as many points as possible.

DK: King Of Swing

■ **DEVELOPER:** PAON
■ **YEAR RELEASED:** 2005

Said to be inspired by the early arcade and NES game *Clu Clu Land* and controlled using just the L and R buttons, *King Of Swing* found DK swinging from pegs to retrieve stolen medallions. With a series of mini-games, *King Of Swing* is a unique puzzle/platformer for the GBA. A fun sequel, *DK: Jungle Climber*, was released for the DS.

Donkey Kong Barrel Blast

■ **DEVELOPER:** PAON
■ **YEAR RELEASED:** 2007

Though we never saw *Donkey Kong Racing*, Nintendo did release a second racing game starring the characters. Originally planned for the GameCube, development was eventually switched to the Wii instead. The game received so-so scores, with many reviewers calling its gameplay dull and plodding – never great for a racing game.

» **The** memorable DK Rap was a cringe-worthy marriage of polygons and rap music but also a clever way to introduce players to the new Kongs that Rare had added to the game.

attributes to DK, but with a look more in keeping with the classic DK Jr.

Essentially a 'power' character, Kiddy was able to throw Dixie farther than Diddy, and his weightiness allowed him to break through floors as well as skim across water. The setting was now the Northern Kremisphere, a diverse, sunny world made up of forests, waterfalls, mines and snow-capped hills, and the theme was biomechanical. As well as the obligatory coin and banana hunt, the characters were now given an inventory, and the game's non-linear hub map forced players to find the appropriate route through the world themselves, though by straying off the path it was possible to discover the occasional hidden area too. A loose RPG element was further incorporated through the introduction of a new family of characters known as the Brothers Bear, whom the apes could find and trade objects with in return for hints and assistance on their quest.

Released in October 1996, a few months after the N64's summer release in Japan, *Donkey Kong Country 3* went largely unnoticed. The impressive-looking ACM visuals, though undoubtedly the best of the trilogy, were now starting to lose their impact against the new wave of bona fide 3D titles, and with many gamers waving goodbye to their Super Nintendos and opening their arms to embrace the company's new console and *Mario 64*, it comes as little surprise that *DKC3* would sell the lowest number of copies in the *DKC* trilogy, and call time on the series' 16-bit days. But that wasn't to spell the end of Rare and DK by any stretch, as both studio and series turned their attentions to the N64. In this same year, the French-Canadian animation studio Nelvana released an animated series based on the franchise. Titled *Donkey Kong Country*, the show incorporated many of the characters that Rare had introduced into the series, including Candy Kong and Funky Kong, and also introduced a few that would never cross over into games, most notably Bluster Kong, a narcissistic ape who, in the series, battled DK for Candy Kong's affections. Airing in Europe, the US and Japan, where it was most popular, the series is famed for being one of the first animated television series to utilise CGI technology.

Though the next two *DK* games are not strictly *Donkey Kong Country* games, we felt that we couldn't examine the history of the series without mentioning them. The *DK* series' first N64 appearance came with the release of *Diddy Kong Racing* in 1997. It was a spin-off racing game that was loosely based on the series, and only two characters from the *DKC* universe actually made it into the game: Diddy, obviously, and a Kremling named Krunch – though Dixie and Tiny Kong would later be added to the game's DS roster. Beginning its life as a separate in-house N64 project at Rare, *Diddy Kong Racing* went through a number of different forms – previous to being *DKR* it was *RC Pro-Am 64*, a sequel to Rare's 1988 NES racer *RC Pro-Am*. When Nintendo offered Rare the opportunity to incorporate Diddy into the game, the chance was too good to let pass, and the game was ultimately tweaked once more. Diddy and Krunch were accompanied

» ***Donkey*** *Kong Country Returns* is a fantastic platformer that effortlessly captures the spirit of the original SNES games.

by other Rare characters, including Conker the squirrel in his videogame debut and Banjo the bear, and the game transformed into a kart racer. Through its inclusion of planes and hovercraft on top of the requisite karts, as well as its novel adventure mode, which helped it to feel more unique than other kart-racing games, *DKR* became another popular instalment and one of the most popular racing games released for the N64.

Released in 1999, and running on the same engine as *Banjo-Kazooie, Donkey Kong 64* was a sprawling 3D adventure. In fact, it was so big that the game was packed with the N64's 4MB Expansion Pak, and became one of the first games to utilise the memory plug-in. Replacing the polished ACM 3D models for polygonal ones while still retaining the look and spirit of the *DKC* games, Rare threw everything at the game, including an arena-based multiplayer mode and one of the most hilariously mad gaming intros ever cooked up, courtesy of the DK Rap. In addition, it also introduced three new playable Kongs to the series in the forms of Lanky, Chunky and Tiny, as well as tucking away playable versions of Ultimate's classic *Jetpac* and the original 1981 *Donkey Kong* coin-op by Nintendo. Assuming the role of Donkey Kong initially, players had to once again retrieve his banana horde and then free four family members from enslavement by King K Rool. Once freed, Kong's relatives then became controllable in the game and, like previous *DKC* games, each exhibited their own unique abilities. The main difference this time was that they were also armed with their own signature projectile weapon and musical instruments. *Donkey Kong 64* split opinion among many fans. Some loved the scale and size of the game, while others found the heavy amount of item-collecting and exploration to be a little tedious and excessive. Nevertheless, the title still received acclaim and even went on to be awarded E3 Game Critics Award for Best Platform Game in 1999, and still remains Donkey Kong's biggest adventure to date.

"Donkey Kong 64 split opinion among many fans"

» **Opinions** were mixed about *DK64*, but we think it's a fitting swansong by Rare in the *DK* franchise.

Following Microsoft's $375 million acquisition of the studio in 2002, Rare was forced to finally part ways with the *DK* series, spelling the end of not only a lucrative and prolific relationship with Nintendo but also with the *Donkey Kong* franchise and its characters. Despite Rare still being allowed to continue its work on developing the *DKC* conversions for Nintendo's Game Boy handhelds (see 'Mini Lands Of The Kongs'), the two studios parting ways saw two *Donkey Kong* projects in development at Rare aborted: a planned GameCube follow-up to *Diddy Kong Racing* titled *Donkey Kong Racing*, which was unveiled at E3 in 2001 and showed DK and relatives racing on the back of the animal helpers from the *Donkey Kong Country* series; and *Donkey Kong Coconut Crackers*, an isometric puzzle game for the Game Boy Advance. The latter game eventually did see release in 2004 when it was redesigned as the puzzle game *It's Mr Pants* and, instead of DK, starred a crudely drawn bowler hat-wearing creation taken from Rare's website.

In 2010 Nintendo released the long-awaited return of *Donkey Kong Country* in the form of *Donkey Kong Country Returns* for Nintendo Wii. Now in the hands of the Texas-based Retro Studios, which was behind the impressive series revival *Metroid Prime* on the GameCube, Nintendo's selection proved to be a sound one. Retro has reunited the original *DKC* duo, DK and Diddy and the game features everything you'd expect to see, including lush jungles and white-knuckle mine cart rides. Well received on release, it proved popular enough to get ported to the 3DS in 2013 and received a standalone sequel, *Donkey Kong Country: Tropical Freeze* in 2014. Once again coded by Retro Studios, *Tropical Freeze* was exclusive to Nintendo's Wii U and featured a distinctive icy theme and a bunch of outlandish, Viking-themed enemies called the Snowmads. It also saw the return of Cranky and Dixie Kong.

Sadly, *Tropical Freeze* was unable to match the success of *Returns* and Nintendo hasn't announced any further games, so it's unclear when Donkey and Diddy will next swing onto our screens. Luckily, if there's one thing history has told us, it's that DK is a resilient beast, and in recent years has been good at helping develop strong relationships rather than break them up. Here's hoping that success will continue with future sequels.

BOY WONDER

A GAME BOY RETROSPECTIVE

It's been over 25 years since the world first glimpsed the Game Boy, the creation of veteran designer Gunpei Yokoi and his team at Nintendo. To celebrate, Retro Gamer looks back at that most modest of handhelds and finds out what made it such a massive success

It's often said that there are no surprises in gaming anymore. In this connected age we now know everything, instantly. The days of walking into a shop and being blindsided by new gaming hardware and software are dead and gone.

But things haven't really changed that much. It was just less immediate in the past, with gamers having to rely on magazines drip-feeding information about exciting new products. This was certainly the case with the Game Boy, the Nintendo handheld that launched in Japan in April 1989 and the US shortly after but wouldn't arrive in Europe until September 1990. The long-running and respected UK magazine *Computer & Video Games* dropped the first details in its May 1989 issue, calling Nintendo's new machine a "micro-marvel". There was a product image too, allowing readers to scrutinise its key characteristics: the D-pad and button configuration, the grey-coloured shell, the yellowy-green screen. Displayed on the screen was a little something called *Super Mario Land*.

It wasn't possible to judge the size however. There were no hands gripping the Game Boy for comparison. All was revealed in the July 1989 issue of *C&VG* when deputy editor Julian Rignall got his own hands on a Japanese Game Boy for an import review. "There's a new Nintendo console in town," wrote Jaz. "It fits comfortably in the palm of your hand, has its own tiny TV screen, and the games come on cartridges the size of a matchbox. Sounds too good to be true?"

Happily Jaz revealed that the Game Boy was not just real but rather quite brilliant. "The console fits in your hand perfectly," he remarked. "Playing games on it is a joy!" While he praised the sharpness of the graphics on the LCD screen, he did note blurry scrolling as a caveat. It was revealed that the handheld was powered by four AA batteries, but no mention of how many hours of play they offered (clearly Jaz wasn't changing them often enough for it to be regarded as an issue). Meanwhile, key Japanese launch title *Super Mario Land* was described as "unbelievably addictive". The review ended with some impressive sales claims from Japan – 500,000 units sold to date, with 300,000 snapped up at launch. Elsewhere in the issue the Game Boy was called "The future of handheld gaming". As Jaz's review was a UK exclusive you could forgive *C&VG* for laying it on thick, yet that statement would turn out to be beautifully prophetic. ▶

OFF-ON
DOT MATRIX WITH STEREO SOUND
SCORE
377
LEVEL
6
LINES
1
BATTERY
Nintendo GAME BOY™
SELECT
START
B
PHONES

"I found the Game Boy to be a very simple and easy machine to code for"

R-Type II programmer Bob Pape

When the Game Boy finally arrived in Europe, almost 18 months after its Japanese debut, there were just half-a-dozen games released alongside it. Of these, *Super Mario Land*, *Tennis* and *Golf* were the must-have titles. One title you didn't have to buy was the revelatory Game Boy version of *Tetris* as it came bundled with the console. This smart move had worked wonders for Nintendo in the US, leading to stellar sales (a reported million units were sold within weeks of its launch). European gamers could now dream of falling blocks too as *Tetris* fever took hold. It really was the perfect pack-in – the ultimate game on the go.

The success of the hardware quickly led to flood of fresh software that identified the Game Boy as a diminutive yet capable contender that could punch above its weight (which was a lean 300g including batteries, if you were wondering). In its first couple of years the handheld was home to some fantastic original titles such as pinball sim *Revenge Of The 'Gator*, platform adventure *Gargoyle's Quest*, and the Game Boy exclusive sequel *Metroid II: Return Of Samus*. There was also plenty of decent and undeniably attractive licensed fare like *Teenage Mutant Ninja Turtles*, *RoboCop* and *Batman*. Coin-ops were converted too with varying results, as you might expect, although *Double Dragon*, *Nemesis* and *R-Type* were all admirable attempts.

The Game Boy's custom processor, which was essentially a Z80 with some bits missing and others added, ensured that many programmers could move over to the machine with little problem. Bob Pape, who coded the celebrated Spectrum version of *R-Type*, went on to develop *R-Type II* for the handheld. "I found the Game Boy to be a very simple and easy machine to code for," he says. "The hardware of course had limitations but then that was the same for all early 8-bit consoles and computers. Some people may have had problems dealing with the limited instruction set of the custom Sharp processor that the Game Boy used, compared to the Z80, but I think for those programmers who were used to having to scratch for every last byte out of a 1K ZX81 or 48K Spectrum through tight coding then it was almost like coming home."

In the past Nintendo has been accused of providing developers with vague or incomplete documentation, but in Bob's experience this wasn't too much of an issue as the hardware was pretty much an open book. "Well if you don't know what's missing then you can't say it's not there!" he comments. "It's more likely that certain coding techniques were kept quiet to give companies an edge, things like how to multiplex the sprites or give the appearance of seven shades of grey. Other ways of programming the hardware were so obvious they didn't need documenting."

Another Z80 developer who gladly moved over to the Game Boy was Ken Murfitt. "In many ways the Game Boy was easier to program that the other Z80 platforms," says Ken, who came chiefly from a Amstrad CPC background and developed *Double Dragon 3* and *The Lawnmower Man* for the Game

» You won't get very far without using these.

MUSICAL INTERLUDE

Jonathan Dunn composed for many Game Boy titles, including the RoboCop theme used on that washing machine advert...

» Music man Jonathan Dunn.

What were your immediate thoughts on the Game Boy as a gaming platform?

When I first tried a Game Boy I thought it was a great little device. Of course the first thing I played was *Tetris* and I was hooked. I also remember that you could connect two Game Boys together and play two-player *Tetris*. That was the first time I'd seen anything like that.

How would you rate the Game Boy's audio capabilities?

The Game Boy had some interesting characteristics. It had a waveform that you could program yourself – 32 4-bit samples that you could define. I remember getting it to make some unusual noises. I also liked the fact that you had some control of stereo placement, though I wish I'd used that a bit more in the work I did. Quite often the stuff I did for the Game Boy was a port from another version so I didn't get to spend enough time experimenting with the possibilities.

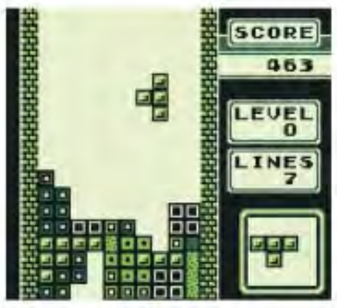
» *RoboCop*. Great game, superb soundtrack.

Did you encounter any technical challenges at all?

I coded my own driver for the C64 and NES and SNES, but at the time didn't have enough knowledge of Z80 to do the audio driver that we needed. So Ocean's John Brandwood was roped in to convert the Spectrum driver, with a few modifications. I wasn't happy with the hardware volume envelopes, so I got John to add a more versatile software envelope system that gave me more accurate control. It had disadvantages as we effectively reduced the bit resolution of the volume, but it did allow me to sync the envelopes with other note-based events.

Your *RoboCop* title theme is still used and sampled to this day.

» Programmer Ken Murfitt is seen here developing Game Boy games at The Sales Curve in London in 1992. He says: "The wide ribbon connector coming out of the PC was plugged into the cartridge slot of a retail Game Boy. Inside the PC was a card that simulated the various cartridge sizes. So there was no emulation as such – you would test and play the game on the Game Boy itself. On the PC, I typed in the actual assembly code using a PC text editor called Brief. It was assembled into machine code and the binary image was downloaded to the memory on the PC card. At this point the Game Boy sees the new game image as a cartridge and begins to execute it. It would usually take me about nine months to finish a Game Boy title."



» *Tetris* was the Game Boy's killer app. It was the perfect fit for Nintendo's new handheld.

» *Tetris* went on to sell millions, benefiting nicely from being a pack-in title.

Boy on behalf of The Sales Curve.

"It was exciting to use real sprite and background-scrolling hardware, after so many years of squeezing every last instruction out of platforms like the CPC and Spectrum. No more pre-shifted sprites that hog memory, sprite masking or the Z80 stack tricks required to perform background scrolling. You could just set up the sprite buffers one time and scrolling hardware registers once per frame and go. Obviously it was a step backwards in terms of colour count – there were four levels of grey against the Amstrad's palette of 27 colours. You could get in-between greys using flickering but it was visually distracting and so I preferred dithering."

So developing for the Game Boy wasn't particularly difficult for seasoned programmers, but Ken notes there were a couple of unexpected considerations. "The first was battery life. The processor was put to sleep using the HALT or STOP command after processing had been completed for a frame, and this would minimise battery drain until the next vertical blank, 60 times per second. It was surprising to me at the time that the battery life could be extended by saving power during these tiny slices of CPU down time."

And then there was the odd entity known as 'Version Zero Game Boy'. Ken explains: "There were these early production Game Boys of which only a few thousand units existed in the world and Nintendo insisted that any submitted title must run perfectly ▶

Does its continued popularity ever surprise you?

I don't think anyone could have guessed that the *RoboCop* theme would become so memorable. At the time it was just another game. It was the norm to produce stuff very quickly and there was always another project looming at Ocean, so you didn't really get time to think about it. If I look back at all the different versions of the same piece of music I had to do, I wonder how I did it. That tune in particular has been sampled a lot and it's great that it's still around.

Do you receive any payment when the *RoboCop* tune is used?

I now collect writer royalties whenever the track is used, though I didn't receive anything when it was used in the Ariston advert. I think Ocean thought it was just getting some free PR and marketing.

What are you up to these days?

For the last two years I've been living in Slovenia working as COO for a games company called IBZooT. I'm also the co-founder of Fatleg Games, a mobile games start-up. I still code, I still write music. It's fun to make small games for mobile. It feels a little like it did in the old days. You don't need massive teams to produce something fun.

» Not just any old Game Boy. This one, owned by **RG**'s Paul Drury, is signed by Alexey Pajitnov.

» *Hook* was another Game Boy game that benefited from Jonathan's music.

GAME BOY BOLT-ONS

Some of the not-so-silly accessories you could buy for your Game Boy

BATTERY PACK

■ Not the most exciting accessory, or most essential seeing as the Game Boy was the least power-hungry handheld. But when your AAs did finally give up, this add-on was good for up to ten hours of extra play. And if you were more likely to be found playing Game Boy at home, it also doubled as a handy AC adapter.

GAME LIGHT

■ The Game Boy was unplayable in low-light conditions so there was no shortage of third-party add-ons designed to brighten up the display. The Game Light from Nubi was one such solution that bolted on to the front of the screen. It required four AAs batteries so it was probably cheaper to find a decent light source instead.

AMPLIFIER

■ Another accessory from Nubi, this device plugged into the headphone socket at the bottom of the Game Boy and boosted the audio output. Sound was louder and also in stereo. With so many ridiculous-looking add-ons available for the Game Boy, this one deserved points for at least trying to match the Game Boy's style and form.

GB CAMERA

■ This quirky add-on was released in 1998 and turned the Game Boy into a compact digital camera (shortly before digital cameras became commonplace). In addition to snapping and reviewing photos, there were a number of built-in 'games' that would feature the player's grinning mug. They were borderline terrifying in all honesty.

GB PRINTER

■ If you had a burning desire to print the grainy, black and white photos you'd taken using the GB Camera then you clearly coveted this tiny thermal printer. Otherwise, a bunch of games supported the device, allowing you to print out high scores, screenshots and the like.

» Yes, the BoosterBoy is just as impractical to use as it looks.

» Capcom's *Gargoyle's Quest* was a fun spin-off from arcade hit *Ghosts 'N' Goblins*.

» If there was a craze then it was all over the Game Boy. There were three *Turtles* games in total.

» If you want to play multiplayer games or use peripherals you'll need this port.

"Nintendo created games that worked well on a small screen with no colour"

Graphics artist Elliot Curtis

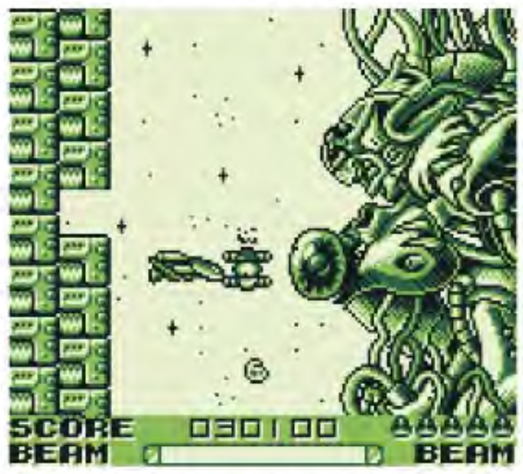
▶ on them. The difference was that the video memory was slightly slower in some respect and problems would be apparent with partially scrambled background tiles appearing in your game due to memory contention. It was a shame because it further restricted how many background blocks you could update during the video blank.

Due to the Game Boy's small screen and limited colour palette, it was the job of artists to ensure that the graphics, and in particular sprites, were as clear and defined as possible. It was a challenge that Elliot Curtis relished. Working for Tiertex Design Studios, he created Game Boy graphics for various Disney licences and *FIFA* entries. "To be offered the chance to make games on a console was a dream," he says. "Yes the Game Boy was limited but the other consoles at the time were actually a bigger struggle to create graphics for. The first time you created a sprite and saw it running on a Game Boy screen was amazing. It always looked way better than it did in Deluxe Paint!"

The biggest headache occurred when creating full-screen images, such as title screens, due to display limitations. "A Game Boy screen is divided into an eight-by-eight grid and each square in that grid is a character," he explains. "When you create a full-screen picture you can actually only use about 21 unique characters. It was nowhere near enough. We had tools from the coder to highlight individual characters once we drew anything, and then we had to be creative by using flipped and rotated characters within the picture. It's always depressing butchering a nice picture but often it was required assets for a licence and there wasn't any scope for creativity. Publisher or licence logos are boring enough to draw without spending all day editing them to make them actually work on the screen."

Elliot's later games were specially optimised for use with the Super Game Boy, the device that enabled Game Boy carts to be played on the Super Nintendo console, often with added colour. Explaining the process, Elliot says: "Colour would be designed into the graphics from the start. I would have four separate palettes of four colours each. I used to work on the Spectrum so the eight-by-eight character colour issues weren't new to me, but Super Game Boy graphics were a pain. The number of people who were ever going to actually see them was so small it seemed like a bit of a waste of time. I actually put a footballer in the border for *FIFA 98* in a Watford strip and got away with it!"

Super Game Boy games at least looked better in magazines – as anyone who tried to screen-grab original Game Boy titles will tell you. Nick Walkland worked on Europress's *GB Action*,



» Bob Pape's *R-Type II* conversion was an improvement over its already fantastic predecessor.

» Street brawler *Double Dragon 3* supported cooperative play on the Game Boy.

MULTIPLAYER ON THE MOVE

You had a Game Boy. Your friends had Game Boys. Game on!

Two Game Boys could be connected together using the link cable that was initially bundled with the handheld. Conveniently, pack-in title *Tetris* included a fantastic two-player mode where players battled it out as Mario and Luigi. It was simple but genius and elevated *Tetris* to even greater heights.

As most Game Boy owners had a cable, lots of titles included two-player support. Sports titles like *Tennis* and *Golf* offered gentle competition while fighting games such as *Mortal Kombat* and *Killer Instinct* let you go toe-to-toe with a pal. The two *Double Dragon* sequels allowed you to team up with a friend and clean up the streets together.

» 'Epic' is not a word you'd ever associate with Game Boy games, but *Link's Awakening* came pretty close.

the UK's first dedicated Game Boy magazine which debuted in 1992. "Game Boy games were a complete pain to screen-grab," says Nick. "We actually took photos because it was so tricky. The Game Boy was placed in this glorified cardboard box, with a black cloth around the entrance, which you put your head inside. Like a Victorian snapper but without the phosphorous flash. But there was always motion blur and when you tried to pause games they tended to come up with a pause screen. To make matters worse the Game Boy looked, well, awful. A bland greeny-grey, with shades in-between."

Nick is not alone in his lack of love for the Game Boy. "It was awful!" laughs Ed Magnin, a programmer who'd previously worked for MicroProse and Cinemaware on Apple II and IIGS software before moving onto the Game Boy at Virgin Games. "The processor was like a Z80 but it wasn't a complete one, and there were banks of memory and the memory had to be switched in and out. So if you had a piece of artwork it wasn't just a question of whether it would fit into the cartridge, but where you had a hole to put it where it wouldn't straddle banks. You know, up until the Nintendo DS, I've always said that it was our job as programmers on Nintendo platforms to make bad technology look better than it should have."

Despite his aversions, Ed was responsible for the fantastic and faithful Game Boy version of *Prince Of Persia*. For this he also had to contend with Nintendo's famously dim view on videogame violence. "Nintendo had these policies where no-one ever died in a Nintendo game," he says. "So for *Prince Of Persia* the first thing we looked at was the slicer. We raised this and Nintendo said it was okay as long as we didn't show any blood. Even on the Game Boy they didn't want a big black puddle oozing out! The pop-up spikes on the floor were also a problem. Years later I found out that Nintendo didn't like what it called 'body deforming violence'. It was okay to get killed but not have the spikes popping out of your back."

For Ed and other developers, whether they were fans of the hardware or not, it was clear that Nintendo had devised a hugely popular platform. The Japanese firm had hit gold with the Game Boy. "It was my daughter who actually got me started on Nintendo," says Ed. "She was in kindergarten and I was out of work as the company I'd just finished a game for had gone out of business. It was hard to find a job and my daughter said 'Dad you should be doing Nintendo!'. And she was right. All of the kids had one!"

"I WANNA BE THE VERY BEST" How the sales of two huge hits stacked up

The Game Boy quickly established itself as the world's number one handheld, and this was in the face of competition from rival machines that arrived shortly after. The Atari Lynx, Sega Game Gear and PC Engine GT (TurboExpress), with their colour screens and superior hardware, looked like a clear generational leap over the Game Boy. It really was men against boys, on paper at least. But the Game Boy subverted expectations and emerged as the clear winner.

The reasons for its success are fourfold. Firstly, the Game Boy was the fastest to market so it was the first portable to capture the interest and imagination of the public. And not only was it first but it was the least expensive too. Prices obviously varied from region to region, but in anyone's language the Game Boy undercut the competition significantly. Further discounting would push the Game Boy towards an impulse purchase price point. The third factor was battery life. Four AA batteries would power the Game Boy for up to 15 hours (and possibly longer if the speaker wasn't too troubled). Rival handhelds were much hungrier, requiring more batteries and exhausting them far sooner. Having to continually buy or recharge batteries was never ideal.

Finally, and crucially, there was the Game Boy's vast library of games. More than 700 titles were released over a period of ten years. Third-party production was plentiful and Nintendo itself continued to support the machine throughout its lifespan. Three *Super Mario Land* sequels appeared in 1992, 1994 and 1998, while the release of *The Legend Of Zelda: Link's Awakening* in 1993 showed that the Game Boy could deftly entertain sprawling adventure games. There was a brace from ▶

» Hear the Game Boy's music in all its glory. Or cover it with your hand.

» There's no back light on the original Game Boy, so adjusting the contrast is a must.

» The On button for the Game Boy also acts as a very handy cartridge lock. Not like they'd fall out...

Double Dragon 3 programmer Ken Murfitt reveals that developing co-op play was tough. "There were some interesting lessons," he says. "It required the efforts of myself and another programmer, Tom Prosser, to test the game – you couldn't flush out all of the synchronisation bugs by yourself. I learned about packets and timing issues. For example, no two Game Boys run at exactly 60Hz – one will be slightly slower. This may sound obvious now but you could not rely on only the vertical blank to synchronise your two-player game."

One of the most popular uses of the link cable was transferring Pokémon between the Red and Blue versions (if you were determined to catch 'em all then linking was mandatory). Battles could be staged between collectors too. A special four-player adapter was also available, although it was only supported by a small number of games. Notable titles included *F-1 Race* (with which the adapter was bundled), *Super RC Pro-Am* and *Gauntlet II*. A mention must also go to *Faceball 2000*, a Game Boy FPS that included support for up to 16 players!

» *Prince Of Persia* programmer Ed Magnin gets to grips with the Game Boy Advance.

» *Donkey Kong* (1994) featured enhanced graphics and a retro border when played on the Super Gamer Boy.

» In *Gauntlet II*, four players could work together – just like in the arcades.

▶ everyone's favourite gorilla too, with the arrival of *Donkey Kong* in 1994 and the first of Rare's *Donkey Kong Land* games in 1995. And just when the Game Boy was starting to look tired, along came *Pokémon* in 1996. The *Pocket Monsters* phenomenon ambled its way West over the next few years and gave the Game Boy a shot in the arm.

Nintendo would refresh the hardware too. The Game Boy Pocket arrived in 1996, sporting a sleek new form and clearer LCD screen. This was followed by the Game Boy Light in 1998, a Japanese exclusive that featured a backlit screen. The long anticipated colour screen Game Boy arrived later in the same year and effectively replaced the original model. Prior to the release of the Game Boy Color, Nintendo revealed that the original Game Boy had sold in excess of 64 million units worldwide.

For graphics artist Elliot Curtis, the key reason why the Game Boy was such a sales success in the face of 'superior' competition was down to its gaming library. "It was Nintendo so it had the best games," he says. "Obviously *Tetris* shifted the units in the first place, but then you could also play *Mario*. Nintendo created games that worked well on a small screen with no colour. Everybody else seemed to be making versions of existing games that were inevitably inferior to the 'proper' version."

Programmer Ken Murfitt agrees: "Something that Nintendo understood well was that consumers enjoy straightforward products that are accessible, robust and low cost, but if I had to sum up the success of the Game Boy in one word it would be 'Tetris'."

Having experienced the Game Boy before most, Jaz Rignall is ideally placed to comment on how it held up over time. Despite the arrival of flashier portables, his appreciation of the Game Boy did not diminish. "If anything, the more I played the competition the better Nintendo's little grey brick looked," he says. "Anything with a colour screen ate batteries as fast as you could shovel them in. The Game Boy was relatively frugal, making it much friendlier on the pocket, energy-wise. It was also nicely designed. These days it looks hefty, but you could hold it and play it for hours comfortably. It was also built like a tank. The Lynx and Game Gear were fragile by comparison. I never had any qualms about bunging it into a bag and taking it anywhere. I loved the PC Engine GT but it was expensive, and some of its games were unplayable because they'd been designed for a big screen. It was also one of the all-time greats for consuming batteries. Ultimately it's about the games and not the tech, and the Game Boy proved that. It had a range of really fun carts – and *Tetris* was a killer app."

Jaz also notes the importance of handhelds to Nintendo's business over the years – from the Game Boy through to the Game Boy Advance, DS and now 3DS. "Just one look at Nintendo's numbers show how much revenue handhelds have brought in. The importance of those numbers has varied from generation to generation, but when Nintendo's flagship console hasn't done so well, handheld success has been critical. The 3DS is a good example of that. Remove its figures from Nintendo's financials from last year and things would be looking pretty dismal."

So what now for Game Boy? When the DS was introduced in 2004, Nintendo made it clear that the Game Boy name was not being retired. Given the firm's current difficulties with the Wii U, there's a possibility we may see a new Game Boy at some point. Imagine a stripped-down handheld designed specifically for playing retro games – essentially a portable Virtual Console with access to not just Game Boy games, but titles from those rival handhelds that once tried to outmuscle the small but mighty Game Boy. That would be a nice surprise. ✱

Special thanks to Warez, Bournemouth (retrowarez.co.uk) for its help with this feature

» Look away now Nintendo! The Prince attempts to pass a deadly slicer.

NINTENDO'S HANDHELD HERITAGE

An essential timeline to gaming on the go – Nintendo style

GAME & WATCH: 1980 ONWARDS

1989

GAME BOY

1998 — 1998 — 1996

GAME BOY COLOR

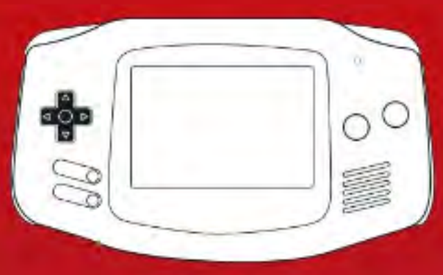
GAME BOY LIGHT

GAME BOY POCKET

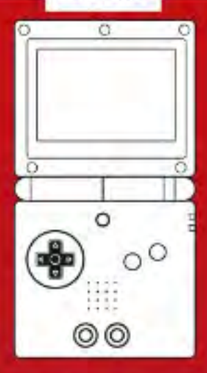
> "The more I played the competition the better Nintendo's little grey brick looked"
>
> Games journalist Jaz Rignall

GAME BOY ADVANCE

2001 — 2003 — 2005



GAME BOY ADVANCE



GAME BOY ADVANCE SP

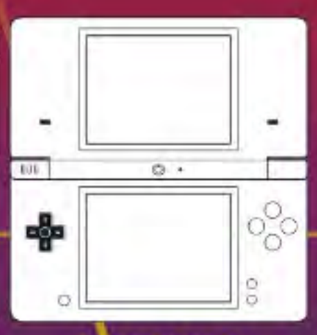
GAME BOY MICRO

NINTENDO DS

2004 — 2006 — 2008 — 2009 — 2011 — 2012 — 2013

NINTENDO DS

NINTENDO DS LITE



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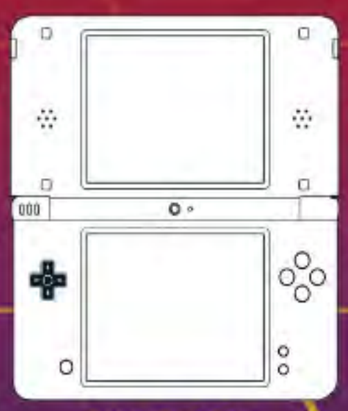


NINTENDO DSi XL

NINTENDO 3DS

NINTENDO 3DS XL

NINTENDO 2DS

BATTERY

retro GAMER READERS' CHOICE

TOP 25 GAME BOY GAMES

Your votes have been counted and the standings are final – these are the very best games for Nintendo's monochrome masterpiece, as chosen by **Retro Gamer** readers

25 MEGA MAN II

■ **DEVELOPER:** BIOX
■ **YEAR:** 1991 ■ **GENRE:** SPORTS

In a surprising opening to our list, series creator Keiji Inafune's least favourite of the Game Boy *Mega Man* games proves to be your favourite. The regular handheld developer for the series took a back seat for this release, resulting in a game which felt different from the rest of the Game Boy titles. The game combines elements of the second and third NES *Mega Man* games, but thankfully for new players the difficulty was lowered.

24 MYSTIC QUEST

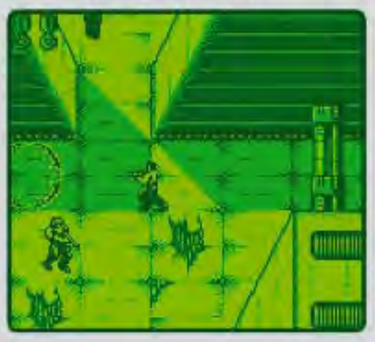
■ **DEVELOPER:** SQUARE
■ **YEAR:** 1991 ■ **GENRE:** ACTION-RPG

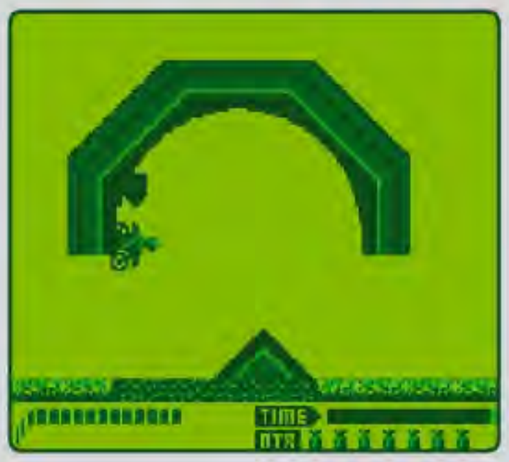
While it was known as *Final Fantasy Adventure* outside of Europe, *Mystic Quest* is only loosely based on Square's classic series, ditching many of the *Final Fantasy* traditions such as multi-character parties and turn-based combat. Instead, *Mystic Quest* is a great little action-RPG in which your goal is to stop the Mana Tree from falling under the control of the Dark Lord of Glaive. Today the game is best known for being the precursor to the SNES classic *Secret Of Mana*, which led to a Game Boy Advance remake titled *Sword Of Mana* in 2003.

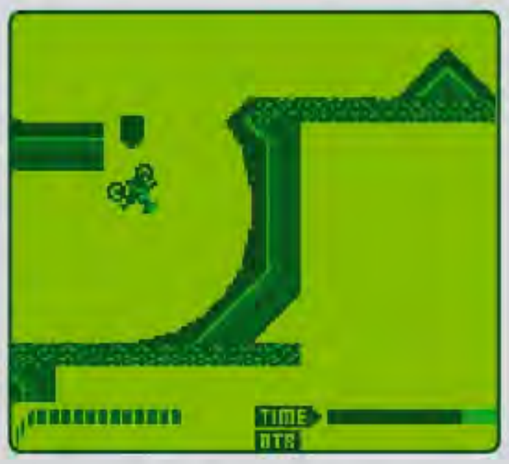
23 PROBOTECTOR

■ **DEVELOPER:** KONAMI
■ **YEAR:** 1991 ■ **GENRE:** RUN-AND-GUN

Known as *Operation C* in North America, *Probotector* fans can't have been disappointed by this fantastic portable outing, which retains the frantic action of the series' arcade and console outings. Alternating between side-scrolling and top-down sections as in *Super Contra*, the blasting is hugely enjoyable in both views. Unsurprisingly, given the game's heritage, it's also a real challenge. One of the Game Boy's best available blasters.







MOTOCROSS MANIACS

■ **DEVELOPER:** KONAMI
■ **YEAR:** 1989 ■ **GENRE:** RACING/PLATFORMER

22 ***Motocross Maniacs* might** not have the best visuals on the system, but it's a blast to play. Combining the motocross gameplay of titles such as *Kikstart* with platform stages, *Motocross Maniacs* presents players with a variety of hills, loops and ramps, requiring excellent balancing and judicious use of nitro to conquer, as well as collection of the T tokens that refill your time bar. Once you've managed to clear stages, beating your best times is the challenge. It's a simple formula, but the fantastic stage design makes it a joy to replay.

As an interesting aside, *Motocross Maniacs* eventually resurfaced on the compilation cartridge *Konami GB Collection Vol 3*, under the new name *Bikers*. It's easy to miss due to this bizarre decision, so if you're looking for a copy you'd do well to keep an eye out for this release too – it's got the Game Boy Color branding, but will still work on monochrome systems.

MONSTER MAX

■ **DEVELOPER:** RARE
■ **YEAR:** 1994 ■ **GENRE:** ISOMETRIC ADVENTURE

21 **It doesn't enjoy** the popularity of *Head Over Heels*, but Jon Ritman's isometric Game Boy adventure is one of your favourite games on the system regardless. *Monster Max* sees the titular protagonist seeking to stop the villainous Krond from banning all music. Taking cues from the 8-bit classic, the game sees Max venturing through a mammoth 29 stages, each filled with platforming and puzzle elements as well as a variety enemies to avoid.

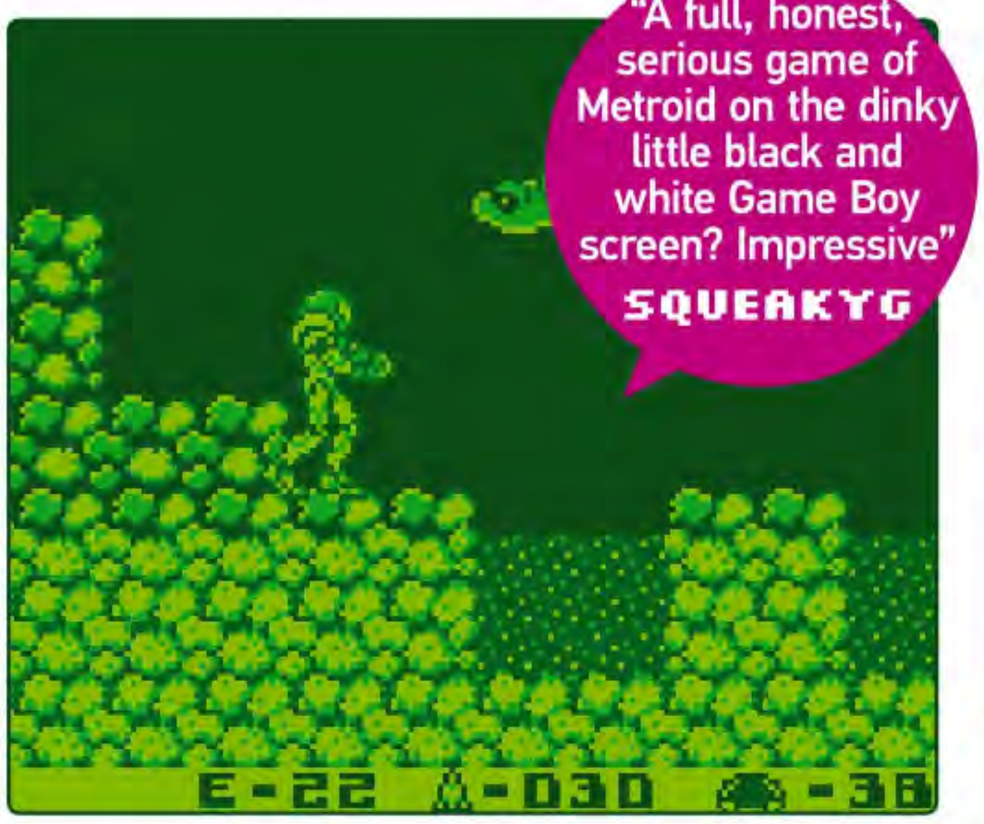
Monster Max received excellent reviews, but publishing problems caused the game to be delayed for a long time, allowing excitement to dissipate. Its release during the system's mid-Nineties slump also hurt, causing sales to fall below expectations and leaving the game as an oft-forgotten classic. We can't help but feel it would have done better in the voting if it had been released during one of the system's boom periods.

METROID II: RETURN OF SAMUS

■ **DEVELOPER:** NINTENDO
■ **YEAR:** 1994 ■ **GENRE:** ACTION-ADVENTURE

20 **While *Metroid II* had** divided fans over the years, Samus Aran's second adventure garnered enough love from the voters to appear in your top 25. The game takes the traditional *Metroid* approach to game design, with a very large stage in place of multiple smaller ones. Your goal is to locate and destroy *Metroid* creatures, with a detector tracking the number remaining in the bottom-right of the screen. Unlike in other *Metroid* releases, destroying Metroids progressively opens up new sections, allowing for further exploration.

While the game doesn't utilise *Metroid*'s usual trick of providing natural barriers to progress by utilising a series of progressive upgrades, which puts some fans off, the game actually features a number of improvements over the NES original that would become standard. Samus is now able to crouch and fire, and power-ups such as the spider ball would later return in the *Metroid Prime* series. *Metroid II* boasts some large, detailed sprites too – Samus is absolutely huge! However, while some appreciate the design, others find it makes the game feel rather too cramped. There's still a lot to like about *Metroid II*, so revisit it some time.



DUCKTALES

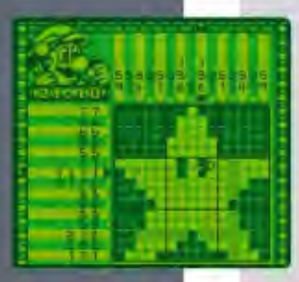
■ **DEVELOPER:** CAPCOM
■ **YEAR:** 1990 ■ **GENRE:** PLATFORMER

19 **Scrooge McDuck's star** turn remains one of the better licensed platformers out there, thanks to Capcom's wise decision to redesign the stages of the NES game to fit the Game Boy's smaller screen.

MARIO'S PICROSS

■ **DEVELOPER:** JUPITER
■ **YEAR:** 1990 ■ **GENRE:** PUZZLE

18 **Cross-referencing the** number of marks in a line to make a picture is the goal of this tricky puzzler. The 30-minute timer doesn't appear threatening at first, but quickly becomes a worry as mistakes chip away the minutes.



KIRBY'S DREAM LAND

■ **DEVELOPER:** HAL LABORATORY
■ **YEAR:** 1992 ■ **GENRE:** PLATFORMER

17 **Kirby's debut might** have been a little on the easy side, but the polished platforming and impressive visuals mean that it's fondly remembered by the **Retro Gamer** readership, getting the nod over its 1995 sequel.

GOLF

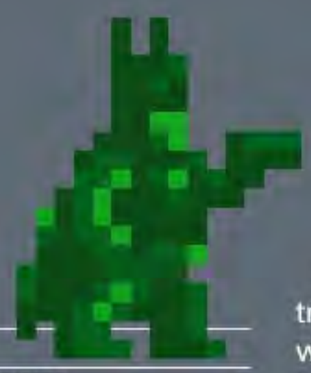
■ **DEVELOPER:** NINTENDO
■ **YEAR:** 1989 ■ **GENRE:** SPORTS

16 ***Golf* doesn't try** to do anything particularly fancy, sticking to a top-down view of two 18-hole courses. The game is comprehensive all the same, featuring hazards, a range of clubs and a putting green with slope physics.

KIRBY'S PINBALL LAND

■ **DEVELOPER:** HAL LABORATORY
■ **YEAR:** 1993 ■ **GENRE:** PINBALL

15 **Are RG readers** really into pinball, or was HAL Laboratory just really good at making pinball games? *Kirby's Pinball Land* includes three tables, expanding on the template set by *Revenge Of The 'Gator*.



BATMAN

DEVELOPER: SUNSOFT

YEAR: 1990 **GENRE:** PLATFORMER

Sunsoft's Batman sprite might be the most minimalist representation of the character yet seen, but the game was packed with playability. Released in the wake of the blockbuster film starring Michael Keaton, this platformer is your favourite movie licence on the Game Boy.

The action sees the caped crusader traversing stages while shooting enemies with a variety of weapons, including batarangs, before going one-on-one with a boss at the end of the stage. As is often the case with great licensed games, *Batman* injects some variety by switching genres, with shoot-'em-up action also included. There's nothing hugely innovative about *Batman*, but it's a game which succeeds as a representation of its source material and a very solid, well-designed platform game.

"Simply amazingly playable! And that music!"
DUMPSTER

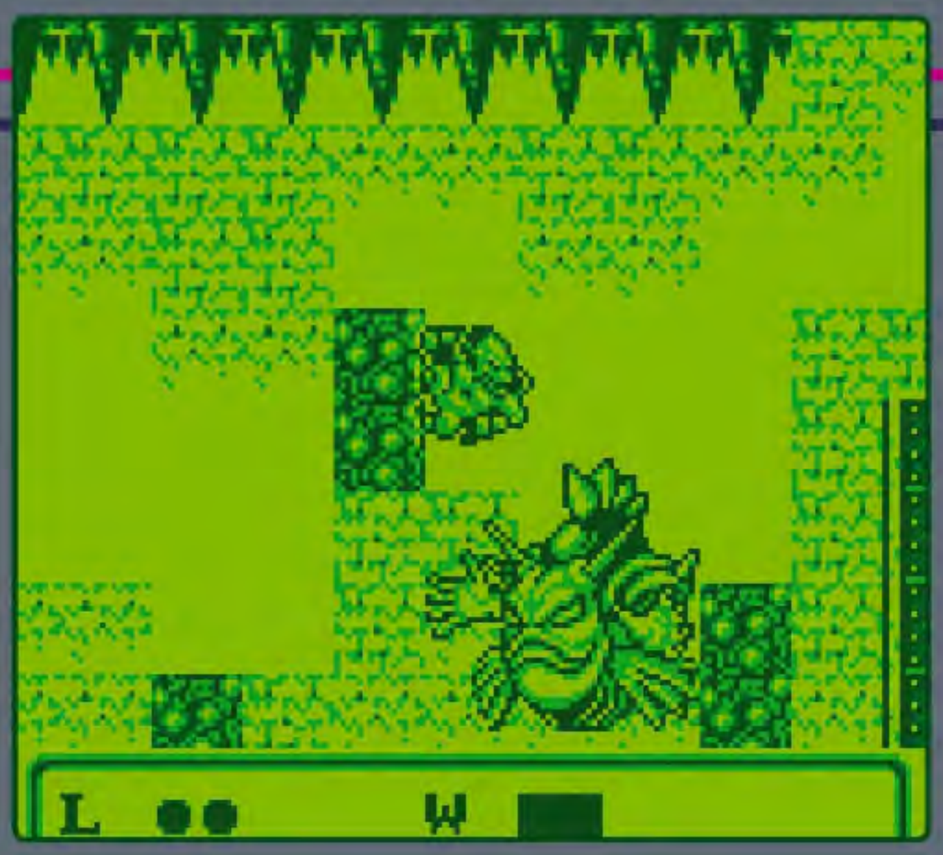
REVENGE OF THE 'GATOR

DEVELOPER: HAL LABORATORY

YEAR: 1989 **GENRE:** PINBALL

HAL Laboratory's first Game Boy pinball game stirs fond memories for **Retro Gamer** readers, beating the developer's later release *Kirby's Pinball Land* in the voting. It's not hard to see why you love it – it isn't just a great Game Boy game, but a fantastic pinball game which stands tall amongst home console contemporaries such as *Alien Crush*.

Wisely adopting a flick-screen format to avoid the blurring that could cause problems in Game Boy titles, the game features just a single table split across four screens. It's excellently designed though – like the other great videogame pinball tables, it takes advantage of the format by including features that are impractical and impossible on a real table, including the three bonus stages that take place on extra screens. Charming visuals round off the package, with the dancing 'gators giving the game a memorable identity.



GARGOYLE'S QUEST

DEVELOPER: CAPCOM

YEAR: 1990 **GENRE:** PLATFORMER

As a spin-off of the *Ghosts 'N Goblins* series, *Gargoyle's Quest* sees you taking on the role of one of the game's most irritating enemies. You play as Firebrand, a gargoyle who is fated to defeat the evil king of the land to restore peace – a goal you faintly wish he could have kept for the main series.

The platforming action in *Gargoyle's Quest* is very polished, with interesting stage design that takes full advantage of the gargoyle's natural affinity for walls. Firebrand can stick to them, allowing him to climb up passages and avoid hazards. He's also got the ability to fly for limited periods, easing tricky jumps. Those abilities are thoroughly necessary though, as the difficulty of the main series returns in full effect. *Gargoyle's Quest* is definitely a challenge, but it remains a thoroughly enjoyable one.

"Mole Mania's friendly exterior conceals a devilish nature, as its difficulty quickly escalates"

SUPER RC PRO-AM

DEVELOPER: RARE

YEAR: 1991 **GENRE:** RACING

Super RC Pro-Am would be great fun on any system, but luckily enough the isometric perspective is perfectly suited to the Game Boy. While it was already present in the enjoyable NES original, this viewpoint goes a long way toward mitigating the problems that the Game Boy's blur-prone screen can cause for racing releases in general. This suitability for the hardware allowed the game to surpass classic multiplayer racers such as *Micro Machines* in the voting, as they simply weren't adapted to the hardware as well.

Super RC Pro-Am brings the fun of radio-controlled racing to the Game Boy. Each track sees you taking on three CPU opponents, with victory determined as much by your ability to manage the hazards of the track as by your cornering skill, thanks to the oil patches, speed-up pads and weaponry strewn across the game's 24 courses. One of the game's most notable features is its multiplayer. Not only does it support two-player via the link cable, it also supports the Four Player Adapter, a perfect addition.

MOLE MANIA

■ **DEVELOPER:** PAX SOFTNICA
■ **YEAR:** 1996 ■ **GENRE:** PUZZLE

10 **Having arrived during** the mid-Nineties, a relatively quiet period for the Game Boy, *Mole Mania* had the potential to become one of the Game Boy's forgotten classics. Indeed, it's one of the most frequently overlooked games to have benefited from the involvement of Shigeru Miyamoto. Thankfully our readers tend to stick by their systems, resulting in *Mole Mania*'s appearance in the top ten – an accolade it thoroughly deserves.

Your hero is Muddy, a mole who is trying to rescue his wife and children, who have been kidnapped by the local farmer. For the player, this means making your way through a series of top-down puzzle stages, eating cabbage to keep your strength up while avoiding enemies. If your route is blocked on the surface, Muddy can dig underground to open up whole new routes. But digging can cause problems, as certain surface obstacles can't pass the holes created in the process. At the end of each stage, Muddy faces off against a boss in order to rescue a relative.

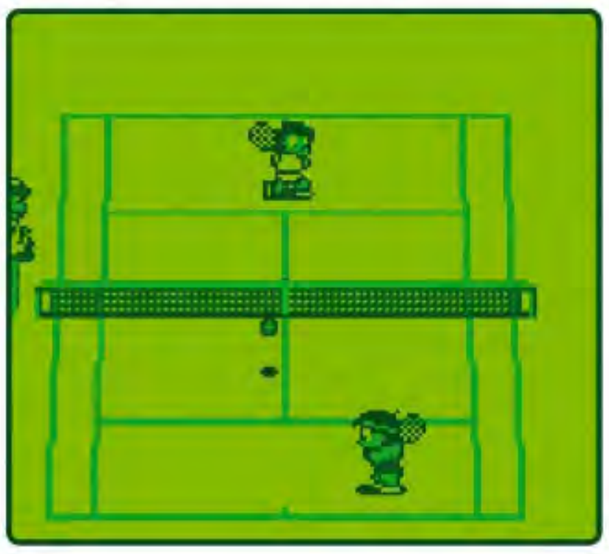
The game's friendly exterior conceals a devilish nature, as its difficulty quickly escalates. Thankfully, the design makes it rather hard to put down. The wide variety of obstacles keeps the game interesting, and the game caters to completists by scoring the performance on each stage out of 100. The game even features multiplayer for those of you lucky enough to have a friend that also owns the game. This mode allows the second player to take control of the farmer, attempting to whack Muddy as he attempts to steal cabbage.

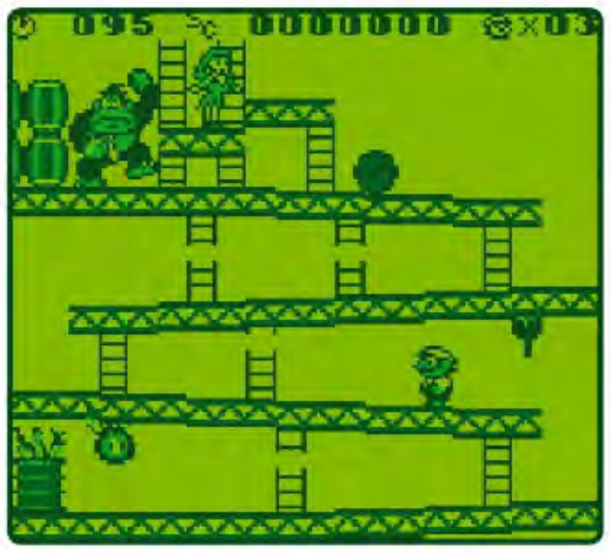
While it's now available via the 3DS Virtual Console service for all of you that missed it the first time around, given that both the 3DS and Wii U have two screens, we'd love to see *Mole Mania* revived for modern systems with Muddy digging between screens. How about it, Nintendo?

TENNIS

■ **DEVELOPER:** NINTENDO
■ **YEAR:** 1989 ■ **GENRE:** SPORTS

9 **As one of** the Game Boy's earliest releases, *Tennis* reached a wide range of players over the years, helping it to ride high in the voting. It's a simple but playable game of tennis, featuring a good implementation of the rules and a full range of shots. While the game doesn't include much in the way of structure, with even a basic tournament mode omitted, the challenging CPU opponents help to pass the time on long journeys and the link cable multiplayer added some welcome longevity. The inclusion of Mario as umpire added some personality to proceedings, greatly boosting the game's memorability.





DONKEY KONG

■ **DEVELOPER:** NINTENDO
■ **YEAR:** 1994 ■ **GENRE:** PLATFORMER

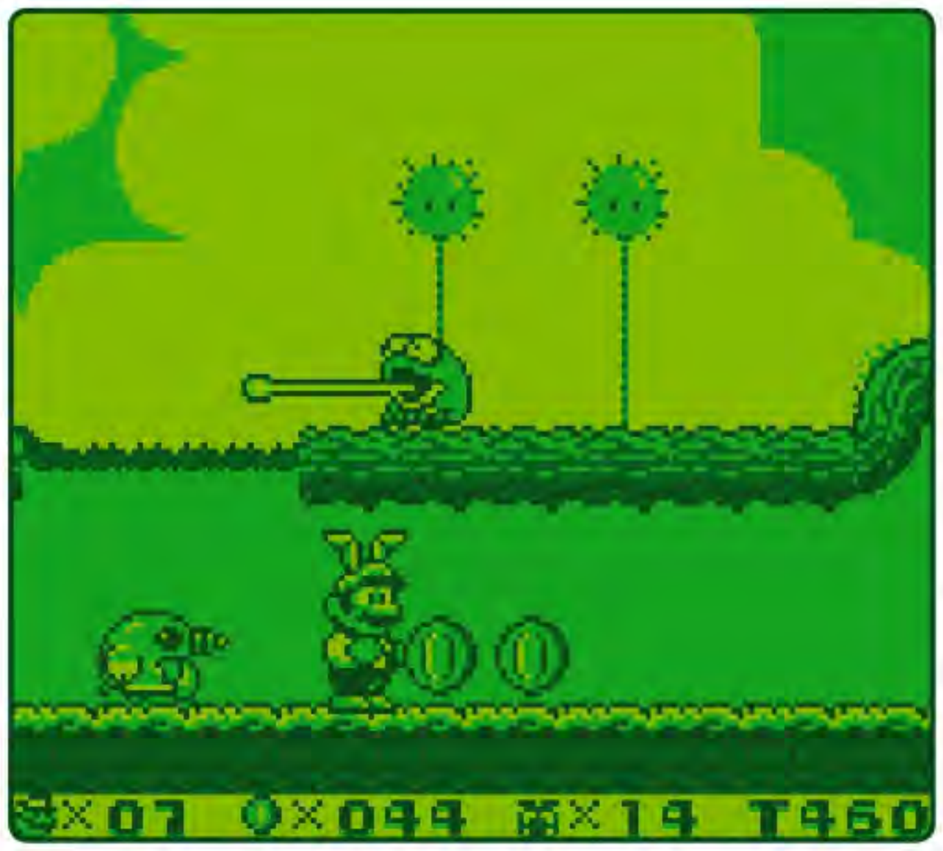
8 **This impressive re-imagining** of *Donkey Kong* starts off simple, with the first four stages taken from the arcade game, leading many to believe it's nothing more than an impressive port of the original arcade game. Nintendo plays a trump card however when the single-screen stages give way as the game turns into a completely different beast. Dozens of puzzle platforming stages await Mario, who needs to find keys to exit each stage. The game also features some great boss encounters with Donkey Kong himself, often returning to the style of the original game. It's also fully compatible with the Super Game Boy.

DOUBLE DRAGON

■ **DEVELOPER:** TECHNOS
■ **YEAR:** 1990 ■ **GENRE:** BEAT-'EM-UP

7 **As a technically** limited machine with a monochrome display, the Game Boy never had an easy time of arcade conversions. With *Double Dragon*, Technos went for the most sensible approach – tailoring the game to the hardware, rather than pushing the hardware to accommodate the game. Built from the ground up for the Game Boy, *Double Dragon* captured the spirit of the arcade game excellently, creating a fun little brawler in the process.

Stages, enemies and weaponry are all instantly recognisable from the original, but have been retooled for the small screen, something that works extremely well. The first stage of the Game Boy game takes elements from the first two stages of the arcade game, and begins to deviate more heavily from the second stage onwards as platforming elements are introduced. Only the inclusion of link cable co-op could have seen this excellent conversion climb higher.



WARIO LAND: SUPER MARIO LAND 3

■ **DEVELOPER:** NINTENDO
■ **YEAR:** 1993 ■ **GENRE:** PLATFORMER

5 Wario's own platformer pipped his villainous debut to make your top five. More than a mere spin-off, Nintendo showed its confidence in the quality of *Wario Land* by giving it the *Super Mario Land 3* title. Reflecting his origins as the bad guy, Wario is out to collect as much cash as possible to buy a castle. The contrast is plain to see in play, too – Mario lightly hops on the heads of his enemies, whereas Wario rams into them with a shoulder barge. Overall, an excellent platform adventure that turned a one-shot villain into a star.

SUPER MARIO LAND 2: 6 GOLDEN COINS

■ **DEVELOPER:** NINTENDO
■ **YEAR:** 1993 ■ **GENRE:** PLATFORMER

6 ***Super Mario Land*** *2* was an impressive technical showcase, highlighting how far Game Boy development had come since 1989. Where the original game featured very basic visuals, a massively increased cartridge capacity allowed *Super Mario Land 2* to feature much more detailed visuals. And while *Super Mario Land* had a linear progression, the sequel allowed players to tackle its six worlds in any order before taking on the game's villain, the debuting Wario.

While it places highly, *Super Mario Land 2* failed to best its predecessor in the voting. Players were divided by the differences, with some favouring the improved visuals of the second game and others preferring the more challenging gameplay of the first.

POKEMON RED AND BLUE

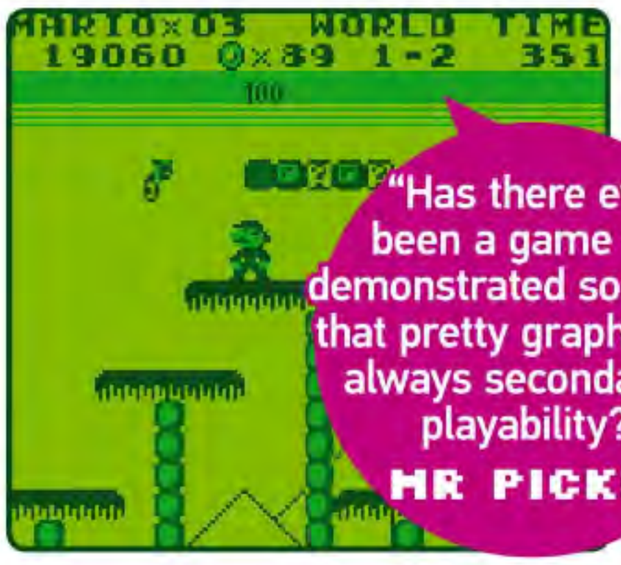
■ **DEVELOPER:** GAME FREAK
■ **YEAR:** 1996 ■ **GENRE:** RPG

4 ***Pokémon*****'s design legacy** stretches back to the early life of the Game Boy, with Satoshi Tajiri's first concept documents dating back to 1990, but it didn't arrive until 1996 – and gamers outside of Japan had to wait even longer. But the timing worked out for Nintendo. While the meat of the game was of a high quality, players worldwide dusted off their hardware for the multiplayer features. With each version boasting exclusive monsters, the full collection of 151 Pokémon can only be obtained by trading with other players, making *Pokémon* the best reason to own a link cable.

SUPER MARIO LAND

■ **DEVELOPER:** NINTENDO
■ **YEAR:** 1989 ■ **GENRE:** PLATFORMER

3 It might be visually simple, but you chose the original *Super Mario Land* over the sequel – and it wasn't close. Mario's Game Boy debut contains the classic gameplay we've come to expect from the plumber's platform outings, but as the only entry in the *Mario* series directed by Satoru Okada, the game has some distinctive features that set it apart from other *Mario* games. Fireballs can be used to collect coins that lie out of Mario's reach, a fact taken into account by level designers, while distinctive enemies such as sphinxes and robots help the game to stick in the memory.


MARIO×03 WORLD TIME
19060 ×39 1-2 351
100
"Has there ever been a game that demonstrated so starkly that pretty graphics are always secondary to playability?"
MR PICKLE

THE LEGEND OF ZELDA: LINK'S AWAKENING

■ **DEVELOPER:** NINTENDO
■ **YEAR:** 1993 ■ **GENRE:** ACTION-RPG

2 Far ahead of the rest of the field and running the winner close, *Link's Awakening* reaches second place. It's not hard to see why – the game is absolutely fantastic, successfully capturing the sense of adventure that we expect from the series. The large world and top-down monster slashing, the solid foundations on which 2D *Zelda* games are built, are both intact. However, it is the strength of storytelling that resonated with players, leaving a long-lasting impression.

Much like *Mystic Quest* earlier in this list, *Link's Awakening* plays around with series conventions by removing Link from his normal Hyrule surroundings. There's no Triforce and even the titular princess is missing, as this classic adventure puts the hero on Koholint Island, where he seeks to wake the Wind Fish. While the characters you'll encounter are often funny, the tale eventually ends on a memorable, bittersweet note.

"This and the Game Boy go hand in hand, they were made for each other"
MARTIN

TETRIS

■ **DEVELOPER:** BULLET-PROOF SOFTWARE ■ **YEAR:** 1989 ■ **GENRE:** PUZZLE

Come on now – did you really think it was going to be anything else? *Tetris* was an absolute phenomenon, selling over 30 million copies and single-handedly ensuring the Game Boy's success over its numerous handheld competitors. While the Game Boy version wasn't the original, the perfect combination of software and hardware ensures that it remains the most fondly remembered.

The genius of *Tetris* is its simplicity – the game can be explained to a newcomer in a matter of seconds. Bricks fall from the top of the screen, you use them to build a wall, and completed rows disappear. The more rows you clear at once, the higher you'll score. The challenge of the game lies in keeping a single session going for as long as possible, with the constantly increasing speed of the game ensuring that you can't last forever. But you always feel you could have done better, so you try again. And again. And a few more times. As "one more go" becomes the most-used phrase in your vocabulary, you realise that you've become addicted to the game. And that's before you even consider the equally addictive multiplayer mode.

Nintendo shrewdly made *Tetris* the official pack-in game for North America and Europe, with the universal appeal of the software driving sales of the hardware and making the game the best-selling Game Boy title in the process. Even the *Pokémon* craze a decade later couldn't topple the success of *Tetris*.

While *Tetris* is simple and the conversion process relatively uncomplicated, actually getting the rights was famously challenging. While the Cold War was nearing its end, the Soviet Union was still massively suspicious of outsiders – particularly Westerners – and the unannounced arrival of Henk Rogers was no small matter. Finding the right people was not only problematic, but caused major problems for those contacted as they came under suspicion of having contact from the West.

The eventual licensing negotiations were conducted with a constant KGB presence, but introduced Henk to *Tetris* designer Alexey Pajitnov, who would receive little financial benefit from the success of the Game Boy release as the copyright belonged to the state, preventing him from claiming any royalties. The two would eventually go into business together when Alexey regained the rights in 1996, forming The Tetris Company.

Tetris is great no matter what you play it on, but the Game Boy version has always felt like the perfect marriage of software and form factor. The game is suitable for quick sessions and is one you'll constantly want to return to, so a version that you are able to take anywhere is clearly going to be awesome – and that's why it's your favourite Game Boy game.

FIVE REASONS WHY IT'S GREAT

- The simple gameplay of *Tetris* gives it universal appeal, which is unmatched by any other game
- *Tetris* saves you money – by being ridiculously addictive, it reduces the amount of time you have for other games
- You can always carry a copy of *Tetris*, thanks to the Game Boy's portable nature
- The rocket launch that follows a high-scoring session is one of the greatest pats on the back in gaming
- The Game Boy's rendition of Russian folk song *Korobeiniki* leaves an indelible imprint on your brain

RETROREVIVAL

Kirby's Dream Land

IT CONSUMES, BUT IT DOES NOT FEED

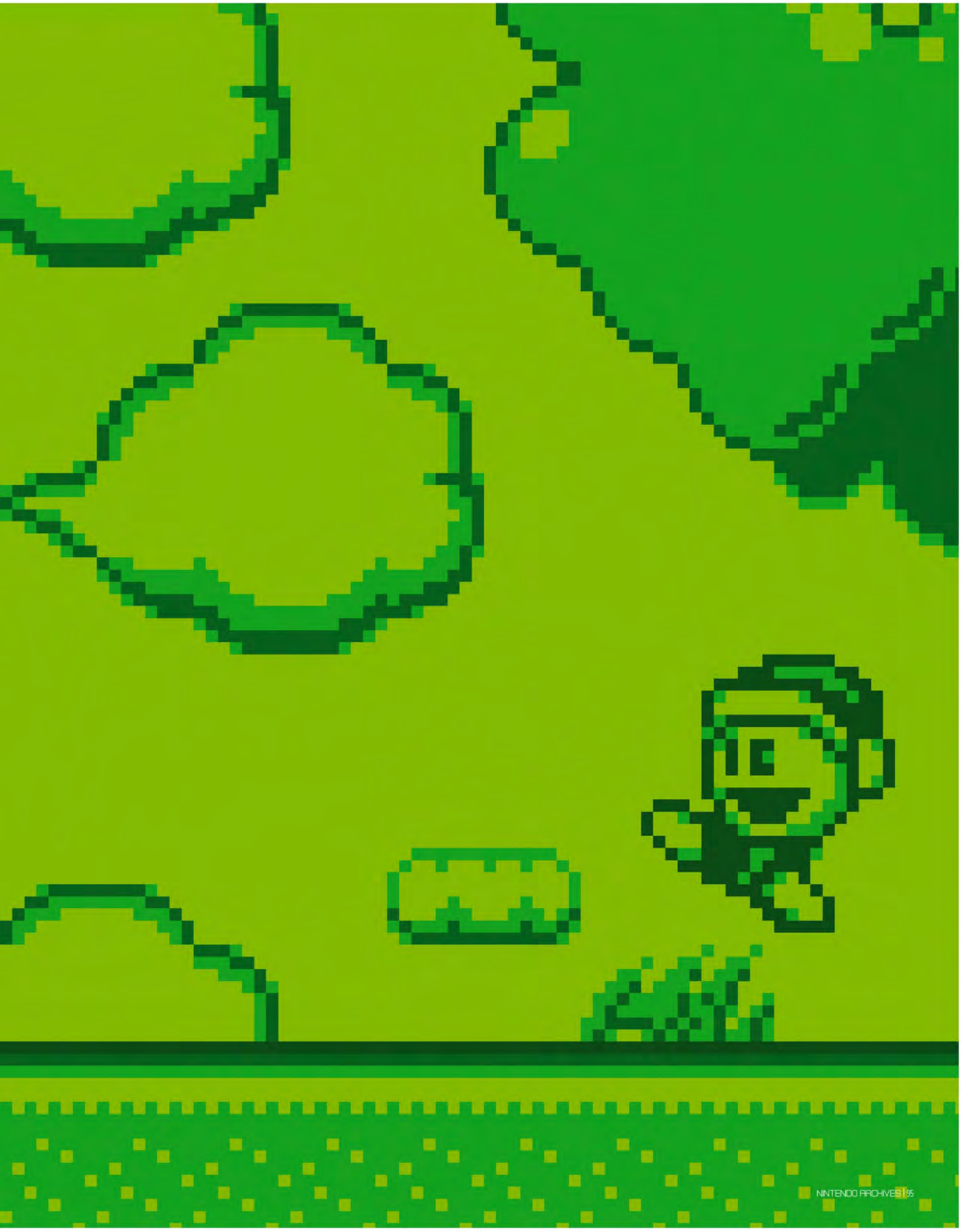
» GAME BOY » HAL LABORATORY » 1992

You don't always get things exactly right on your first attempt, and neither do videogame developers – even the very best can miss out something that will come to define the series down the line. You couldn't perform combos in the original *Street Fighter*, Sonic didn't learn the spin dash until the sequel, and Kirby couldn't copy any abilities until *Kirby's Adventure*. That last point is a bit problematic, though.

I've always accepted Kirby's constant inhalation of enemies as a means of drawing some form of sustenance – after all, *something* is clearly happening in there when Kirby copies abilities. But when this aspect of the character is removed, suddenly there's no advantage in simply digesting enemies, and it's better to spit them out. Are we to believe that none of the creatures in Dream Land actually have nutritional value? This seemingly happy platform game suddenly becomes a lot less jolly when you consider that Kirby's clearly rampant hunger might never be adequately satisfied.

I appreciate that this might sound a little far-fetched, but just look at the game's cover art – our hero is white as a sheet, a far cry from the vibrant pink hue that we're used to. Clearly Kirby has got some health problems that need to be addressed. Seriously, knowing that your protagonist is barely keeping the Grim Reaper at bay is extremely disconcerting, and we're surprised Nintendo would make a game this dark.

Then again, I could just be reading too much into some early instalment weirdness... ✱



DAMIEN MCFERRAN SPEAKS TO DEVELOPERS AND FANS TO FIND OUT WHAT MADE NINTENDO'S LEGENDARY 16-BIT CONSOLE SO SPECIAL

PLAYING WITH POWER

CELEBRATING THE SUPER NINTENDO

PLAYING WITH POWER

Many gaming systems have been branded iconic over the years, but that term seems almost inadequate to describe the Super Nintendo, a console which is perhaps the finest ever produced by industry veteran Nintendo. The Kyoto-based company's sophomore home system had the hardest of acts to follow; the NES – or Famicom as it was known in its native Japan – was a commercial success in North America and Japan, essentially granting its maker a monopoly on home console-based interactive entertainment. Post-NES, Nintendo's job was made harder by the fact that rival firms had upped their game and entered the market with powerful challengers, such as the NEC PC Engine and Sega Mega Drive, which launched in 1987 and 1988 respectively. By the time Nintendo was ready to officially announce its 16-bit console, the aging NES was losing audience share to these spritely new systems, and something drastic was required to put Nintendo back on top. Looking back now a quarter of a century later, it's impossible to deny that the SNES did just that, and much more besides. By the time Nintendo moved onto the N64, its 16-bit system was home not only to some of the finest games of the generation, but of all time – and they've endured in the years that have elapsed since then.

DIFFERENT VERSIONS

The SNES had a number of forms...

SUPER FAMICOM

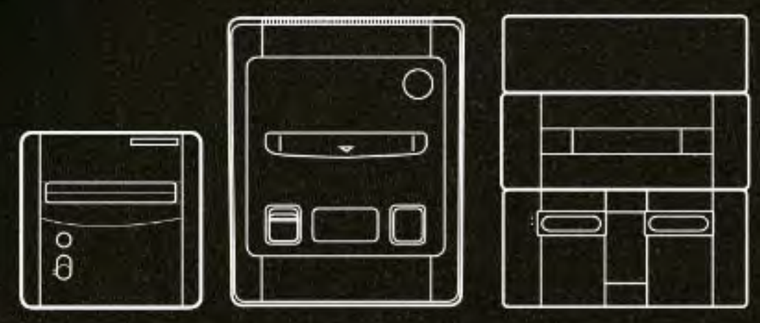
■ Sleek, playful and undeniably classy, the Super Famicom boasted a design which was far removed from the plain and boxy Famicom. The controllers were revolutionary and the four-colour logo has become a cult icon – Nintendo even resurrected the colours for its recent New Nintendo 3DS handheld. On the base of the console an expansion port exists which allows it to connect to the Japan-only Satellaview add-on. The PAL version (shown here) looks identical, but sports SNES branding.

SNES JR/ SNES MINI

■ Launched in 1997 – a time when most players had moved onto more powerful hardware – the SNES Jr was marketed as a cheap, entry-level proposition for younger players. Smaller in size and cheaper to produce, this revised system lacks RGB output as standard but can be modified to obtain it. The power LED and eject button – both hallmarks of the original design – are also absent, as is the expansion port on the bottom.

SNES (NORTH AMERICA)

■ For some unfathomable reason, Nintendo used a totally different case design for the SNES in North America. Designed by Nintendo Of America's Lance Barr, the boxy and unattractive system dropped the four-colour buttons in favour of a purple and pink pallette. The cartridges were also changed, with the US versions adopting the same squared-off design to match the console itself. Thankfully, the European model reverted to the Japanese design, but many misguided American fans swear their version looks best.



» The front of the SNES is elegant. It sports power, eject and reset buttons in front of the cartridge slot.

Back in the early-Nineties when the news came that a successor to the all-conquering NES was in the works, it wasn't just gamers the world over who were rubbing their hands with glee – developers who had made a living on Nintendo's 8-bit system were also keen to see if it could live up to the hype. "It was exciting to see the specs," recalls Chris Sutherland, a former Rare developer who is now working on *Yooka-Laylee* at Playtonic Games. "Previously I'd developed on Game Boy and many others at Rare had worked on NES, so this was a chance to develop games that had far fewer technical limitations." Fellow Rare alumni Brendan Gunn agrees. "It felt like a natural progression from the NES that I was already very familiar with. This made it very easy to get up to speed. The hardware features were far more advanced, but in ways that seemed like a very natural progression." Other developers simply couldn't believe what Nintendo was telling them. "I was given a preliminary outline of what the machine could do," remembers Nick Jones, the former Shiny Entertainment staffer responsible for the SNES versions of *Earthworm Jim* and *Alien 3*. "It seemed impossibly optimistic and with no hardware or full manual, it was hard to really make out what the machine could do. It was like somebody took every programming restriction I'd ever had and just moved the limits an order of magnitude ahead."

For Brendan and Chris, the SNES represented the next step in the evolution of the games console. "The level of restrictions on the NES and Game Boy had been raised, which is why SNES games tended to have larger characters," says Chris. "Back then, characters were typically built from a number of 8x8 sprites, and if you had more than a certain number of sprites in a row, you'd see parts of your sprite disappear." Compared to rival hardware of the time the SNES' gaming-focused internals allowed for some amazing experiences. "The SNES felt much easier to work with, but that may be because it was so much like an enhanced NES," says Brendan. "It helped that the hardware was designed very specifically with things like scrolling and parallaxing in mind, where the Amiga hardware was designed to be a more general purpose computer." Mike Dailly – who was employed at DMA Design when the SNES launched and worked on *Unirally* – feels that the system was head and shoulders above its competition. "It was better than the Amiga and PC by miles, and the hardware was better than the Mega Drive," he says. "There were just so many toys to play with. I preferred the SNES over everything else. I thought it was an amazingly cool machine."

> **"IT FELT LIKE A NATURAL PROGRESSION FROM THE NES THAT I WAS ALREADY VERY FAMILIAR WITH. THIS MADE IT VERY EASY TO GET UP TO SPEED"**
> Brendan Gunn

While Rare's staff was arguably in a privileged position, having gained valuable experience of Nintendo hardware via its wide selection of games on the NES and Game Boy, other developers had to muck in and learn the hard way. "I went from the C64 which had a 6502 processor straight to the SNES which had a 65816 processor," explains Nick. "They are almost identical except that the 65816 is 16-bit and the 6502 is 8-bit, so you'd think the transition would have been easy, but it wasn't. I was stuck in this mindset that I needed to optimise every byte. The hardware was a

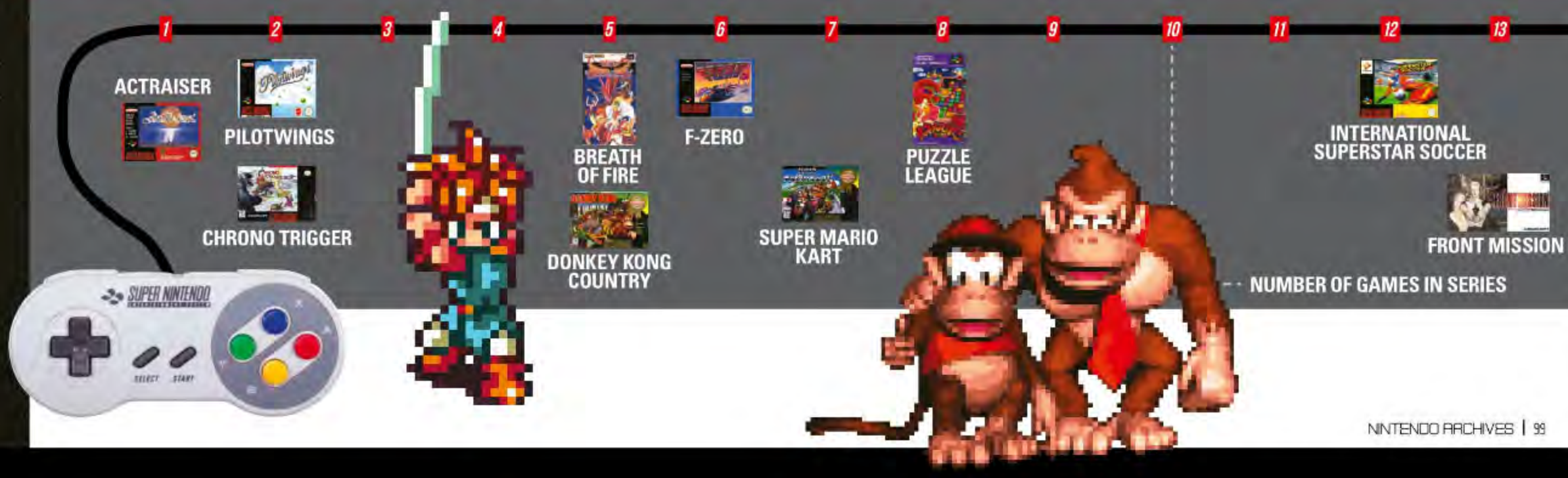
» *Pilotwings* highlights what the SNES could achieve using Mode 7.

» Many thought *Donkey Kong Country* was a next-gen game.

» *Super Mario Kart* remains our favourite game in the series.

FRANCHISE STARTERS

Just some of the brilliant franchises that began on SNES



STAR POWER

Ten legendary developers that made the SNES sing

Nintendo

■ Unsurprisingly, Nintendo itself was the company which did the most to define the SNES, releasing some of the console's best games.

CAPCOM®

■ The arcade conversion of *Street Fighter II* remains one of the most important SNES releases, and gave Nintendo a massive advantage over rival Sega.

SQUARESOFT

■ The undisputed master of the RPG, Square produced some of its finest work on the SNES, but sadly many of its titles remained exclusive to Japan.

KONAMI

■ Responsible for some amazing arcade and action games for the SNES, including *Super Castlevania IV*, *Axelay*, *Parodius* and *Turtles In Time*.

Acclaim

■ Titles like *NBA Jam* and the *Mortal Kombat* series made Acclaim a household name in the Nineties, and it scored many commercial hits on the SNES.

"MODE 7 MADE THE HEADLINES, BUT WAS OF LIMITED USE FOR THE KIND OF GAMES WE WANTED TO MAKE. THE OTHER FEATURES WERE FAR MORE EXCITING TO ME"

Brendan Gunn

» The SNES pad was surprisingly comfortable and a big improvement over the NES pad.

lot more complex which took a little getting used to. The manual was written in English by what I assumed to be a Nintendo engineer who wasn't entirely fluent in English, so I had to be a flexible when reading how something worked. I still have my manuals and I prize them."

The SNES heralded a new era of trickery thanks to the inclusion of Mode 7, a graphical mode which allowed it to smoothly scale and rotate a single background layer. It was put to good use in titles like *F-Zero*, *Pilotwings*, *Super Mario Kart*, *Super Castlevania IV* and *ActRaiser*. While it was an impressive visual trick, its effectiveness was restricted outside of certain genres. "Mode 7 made all the headlines, but was of limited use for the kind of games we wanted to make," explains Brendan. "The other features were far more exciting to me. Multi-layered parallaxing and colour blending made for much richer backdrops, while bigger sprites gave us far greater capabilities for big, colourful characters," Chris agrees. "We actually stayed clear of Mode 7 for the most part because the ability to scale and rotate was so new and shiny, it felt like it was obligatory for games to use this mode. It also had limitations in its use that made us veer towards using the other modes with some tricks to appear to add more 'layers' of movement than the hardware supported."

The SNES was cutting-edge, but the market into which it was thrust was very different to the one the NES had dominated so effortlessly. Sega was no longer content with second place and thanks to savvy marketing and an earlier release it managed to secure a chunk of the North American and European markets with its Mega Drive system. What occurred next has become the stuff of legend, forever ingrained in the consciousness of the gamers who lived through it: the industry's first *real* console war. "It was interesting because this was a time when there was a difference between each platform," says Jonathan Town, a former Nintendo community manager and retro-gaming aficionado. "These days it doesn't matter too much whether you have a PC, PS4 or Xbox One as the majority of titles are the same and the differences are negligible. The SNES and Mega Drive had a charm to them and even the same game would be different depending on which console you had. Instead of arguments over frame-rates we had *Sonic* vs *Mario*, *Final Fight* vs *Streets Of Rage*, *Star Fox* vs *Silpheed*; each console had a clear personality."

Naturally, Nintendo's console was compared directly to Sega's hardware, and the respective strengths and weaknesses of the pair were highlighted in the magazines of the period. "They were both very comparable machines," says Nick Jones. "The Mega Drive had a faster processor, slightly bigger screen resolution and a synth chip for audio. The SNES had complex graphics modes, a higher range of colours, the video signal was a lot cleaner and it played audio samples for sound – which was a disadvantage and an advantage at the same time." While the SNES boasted superior capabilities, much was made of the console's slower CPU – a trade-off Nintendo made to ensure it cost less to manufacture. The weaker chip is often blamed for the lack of fast-paced shooters on the platform, but Chris Sutherland insists that it was rarely an issue from his perspective. "The speed issue wasn't something that we encountered too much with the *Donkey*

■ Virgin was a prolific publisher on both the Mega Drive and SNES, releasing titles like *Earthworm Jim*, *The Lion King* and *RoboCop Versus The Terminator*.

■ Before merging with Squaresoft, Enix was its rival and made the popular *Dragon Quest* franchise.

■ Once the home of programming Pickford siblings, this studio produced *Plok*, *Equinox*, *Ken Griffey Jr. Baseball* and more for the SNES.

■ Sunsoft's prolific work during the 16-bit era may not have yielded many solid gold classics but the company certainly pumped out quite a few SNES releases.

■ The creator of one of the SNES' most important titles – *Donkey Kong Country* – UK-based Rare mastered the hardware in a way few others could manage.

» The *Earthworm Jim* franchise received two games on SNES.

» One of the most enjoyable scrolling fighters you can play on SNES.

Kong Country series – perhaps because we were brought up on resource-starved consoles such as NES and Game Boy so we were always trying to be keep things optimised as we developed. Back then systems like that with specialised sprite video hardware that targeted video games could often outshine what was done on a standard PC."

Nick feels that the sluggish CPU was definitely a shortcoming, but like Chris, he was able to overcome this with some clever programming. "It was a little bit of a handicap for sure," he says. "The processor wasn't as powerful and it didn't have as many registers either. One advantage I had was that I came from a C64 background. The processor on that chip was even more restrictive and all games on that machine had to run at 50MHz so I learnt a lot of tricks to achieve that magical frame-rate. Even when I went to Shiny and we worked on *Earthworm Jim*, I didn't tell the Mega Drive programmers my 65816 tricks for over a year so that it evened the playing field. One of the other restrictions was the way that sprites were drawn onto the screen. The SNES was much more limited so you had to draw a lot more sprites to get the same graphic on a screen, which meant more processing power just to set the graphics up. I was able to disguise most of the difference in processor speed. If you play *Earthworm Jim* on the SNES and Mega Drive, the most obvious way to spot the speed difference is when starting a level. Because that was when the game was decompressing the level and graphics – a task limited by processing power. The levels would take about three times longer to decompress on the SNES."

Nintendo augmented the power of the console with additional chips which were packed into the cartridges, the most famous of which is the Super FX chip, used in *Star Fox*.

These days, it's often the case that developers require time to fully harness the power of a console, and as a result, the software you see at launch is but a taster of what's to come – by the end of a console's lifespan,

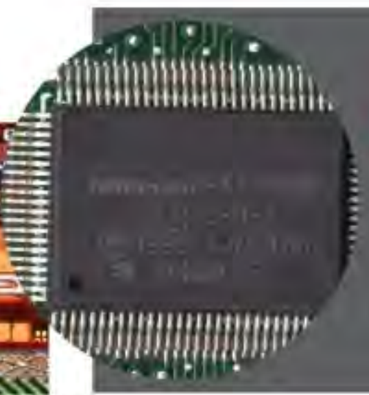
» Handily, the AV lead for the SNES's output can also be used on a GameCube if you own one.

CONSOLE WARS

Scraps that defined an era

MARIO VS SONIC

■ While the *Sonic* games arguably lacked the deep playability of *Super Mario*, the blue hedgehog was marketed perfectly and stole a lot of the Italian plumber's thunder in the early-Nineties. The simultaneous worldwide launch of *Sonic 2* was an event which eclipsed even Nintendo's amazing efforts.



SUPER FX VS SVP

■ As the SNES and Mega Drive grew older and the industry's focus on 3D gaming became ever more apparent, Nintendo decided to enlist the help of UK developer Argonaut to create a chip to bolster the console's polygon-pushing prowess. Sega countered with the Sega Virtua Processor (SVP for short).

SVP Image © Socram8888

FINAL FIGHT VS STREETS OF RAGE

■ When Nintendo secured the port of *Final Fight* it was a massive blow to Mega Drive owners. In typical Sega fashion, the company simply created its own clone:*Streets Of Rage*. The title scored a victory over it SNES counterpart by offering a two-player mode.

STREET FIGHTER II

■ When Nintendo managed to get the first home conversion of the legendary brawler it turned Nintendo's console into the must-have system of the era. A Mega Drive release would follow in due course, but the damage was done – the SNES had scored a massive victory over its rival.

SNES VS PLAYSTATION

■ The recently-unearthed prototype has resurrected interest in this system, which would have been a SNES and Sony CD-ROM drive combined. Nintendo ditched Sony the day after the console was announced. Sony wore revenge and the SNES-less PlayStation launched in 1994, conquering the industry.

MORTAL KOMBAT

■ Family-friendly Nintendo was always going to have an issue with Midway's gore-filled fighter. Ironically, the SNES got the best port in technical terms but at Nintendo's behest the gore was expunged. While the Mega Drive version also suffered censorship, a code could unlock the gore – making it the version everyone wanted.

PERIPHERALS

The SNES had some cool add-ons...

SUPER GAME BOY

■ This nifty device not only allowed you to play Game Boy games on your TV, but expanded a fair few games in interesting ways, too. The most obvious was that you could add borders to games you played or change the traditional four shades of green to different colours. Some titles featured enhanced sound, while certain games let you use a second SNES controller to play two-player games.

SUPER EVERDRIVE

■ If you're a fan of homebrew or backing up your own games then the Super EverDrive is an essential piece of kit. It plugs into your SNES and allows you to add ROMs to it via a SD card. There are various versions available and they included Game Genie cheat codes, with optional USB ports being available for homebrew devs. It's certainly not cheap, but it's very good at what it does.

SUPER SCOPE

■ The Zapper was popular on the NES, so Nintendo tried to replicate its success with the Super Scope. While it has some decent games in the form of *Operation Thunderbolt*, *Tin Star*, *Yoshi's Safari* and *T2: The Arcade Game*, it's not as essential as the Zapper. Its biggest problem was the peripheral's rather unweildly size; while it set the Super Scope apart, it ensured it wasn't as practical to use.

SUPER NES MOUSE

■ Originally packaged with *Mario Paint*, the SNES Mouse proved to be quite a well-supported peripheral. Although a large number of games were only released in Japan, over 30 titles were released in the West, including *Cannon Fodder*, *Eye Of The Beholder*, *Pieces* and *Powermonger*. The only thing that really lets it down is the relatively short lead that connects it to your SNES.

the games are leagues ahead of earlier releases. However, the SNES is unique in that the game it launched with is still considered by many to be its finest single piece of software. All of the developers we interviewed list *Super Mario World* as one of their favourite SNES games, with Mike Dailly even rating it as his favourite game of all time. This platformer is legendary even by today's standards, and is merely the cherry on the top of a library which surely ranks as one of the best the industry has ever seen. "I definitely have to choose *Super Mario World* as my go-to game," says Jonathan Town. "However aside from that obvious choice, I really love *Axelay*. It's a lovely-looking shoot-'em-up with a gorgeous soundtrack and balanced difficulty. What really makes it for me though is *Axelay* was a console exclusive, made especially to play to the strengths of the SNES, from the incredible effect on the vertical stages to subtle use of sprite scaling on the boss battles." Some of the console's best games are, refreshingly, a little off the beaten track, such as Human's *The Firemen*. "It's a story-led action game that sort of reminds me of the movie, *Die Hard*," explains collector Stuart Brett, who is planning to publish a book about Super Famicom art soon. "A fire breaks

out at a Christmas party in a corporate skyscraper and we play as Pete Grey and Daniel McClean as they tackle the fire, floor-by-floor, rescuing employees and taking out security robots along the way. It has some great dialogue and character design. It's a lot of fun."

What makes the SNES so remarkable is that it was strong in so many genres, and literally had something to offer for gamers of all tastes. However, one genre in which it excelled was the RPG. "It was the undisputed king of RPGs," continues Stuart. "From the *Earthbound*, *Secret Of Mana* and *Chrono Trigger*, to the *Final Fantasy* series, *Illusion of Gaia* and *Tales of Phantasia* – they were just incredible games that you could sink hours into. However, that's just the tip of the iceberg. The Japanese market had hundreds more, some of which have been translated and patched by fans. I'm still discovering new RPGs for

THE COLLECTOR

Stuart Brett on collecting Super Famicom games

Roughly how many SNES and Super Famicom games do you have in your collection?
I have just under 400 now. Around a quarter of my games are stored away. I sold off quite a few games last year, mostly games I never play. They were taking over my games room and filling my wardrobe and I was running out space to store my clothes so I sold some off!

What single item has cost you the most?
Spider-Man: Lethal Foes. It was around £280. That was a recent purchase. All the other games I have which are worth thousands (according to ebay sellers) were never that price when I bought them. I have always tried to not overspend and I enjoy hunting down a bargain.

What item do you treasure most from this collection?
I enjoy playing my Super Famicom Box. It's a special version of the console that Nintendo developed for use in Japanese hotels. They contain some unique versions of some classic games, including *Star Fox* and *Mario Kart*.

Can you tell us a little about your book, *Super Famicom: The Box Art Collection*?
I wanted to design a book that celebrates the art and effort that went into game design in the Nineties. There will be over 250 games inside and editing the book with me is Steve Jarratt, ex-editor of *Edge*. The book will be published by Bitmap books and pre-ordering will be announced later this year.

SEQUEL THIS

Ten SNES exclusives that deserved sequels

AXELAY 1992

■ Konami's superlative shooter was not only the perfect advertisement for the console's amazing graphical capabilities, it also played like a dream – no small feat when you consider how unsuited the SNES was to this kind of game. Amazing music, gripping gameplay and timelessly attractive visuals make for a true classic – a sequel was hinted in the end credits, but never came.

ARCANA 1992

■ Unkind observers might brand this little more than a shameless clone of Sega's *Shining In The Darkness*, but it's actually a much better game that doesn't get near enough credit. Turn-based battles and dungeon-crawling make for a stern challenge, while the gorgeous visuals and a painfully beautiful soundtrack ensure it looks and sounds as good as it plays.

SOUL BLAZER 1992

■ While many fans lump this RPG in with fellow Quintet titles *Illusion Of Gaia* and *Terranigma* as a trilogy, the titles are actually self-contained offerings. Out of the three, this is perhaps the most underrated and most deserving of a sequel. It mixes exploration with real-time action, and the notion of rebuilding a world through your actions lends the game additional appeal.

PLOK 1993

■ The work of Ste and John Pickford, *Plok* is a typically zany platforming epic which apparently gained the appreciation of Shigeru Miyamoto himself. Colourful, action-packed and delightfully playable, *Plok* has since been resurrected by the Pickford brothers in a webcomic, and the 16-bit original remains one of the most unique platformers of the period.

E.V.O.: SEARCH FOR EDEN 1993

■ Arguably one of the most original games on the console, *E.V.O.* is a superb mixture of action and role-playing, with the player assuming control of various beasts from Earth's past. Success in combat allows you to level-up and evolve your creature which means they can better deal with environmental changes. It's bonkers, but compelling all the same.

UNIRALLY 1994

■ Known as *Uniracers* in North America, this fast-paced racing title focused on stuntwork and earned critical praise at the time of release. However, due to the similarity between the main character and the unicycle in Pixar's animated short *Red's Dream*, Nintendo was forced to bow to legal pressure and not manufacture any more copies once the initial 300,000 run had sold out.

» We greatly prefer the artwork found on Japanese games. The boxes feel a little sturdier too.

"THE SNES' WEAKNESS WAS LACK OF ARCADE CONVERSIONS OF ANY WORTH, WHILE THE MEGA DRIVE WAS DROWNING IN THEM"

Jonathan Town

▶ the console. The latest being *Verne World*, which is set in a futuristic theme park." While there were notable shooters – like the aforementioned *Axelay* – this is practically the only genre that Nintendo's console struggled with, thanks to the slow CPU. "The SNES' weakness was lack of arcade conversions of any worth, while the Mega Drive was drowning in them," admits Jonathan. "Shooters in particular – there are a few great ones, but only a handful."

Like the Mega Drive, the SNES was supposed to get a hardware expansion which leveraged the incredible capacity of CD-ROM discs, and while Nintendo partnered with electronics giant Sony to work on the unit, it ever made it to market. The recent discovery of a SNES PlayStation prototype has put this ill-fated venture back in the headlines and jogged the memories of developers who were shown the tech at the time. "During the winter 1992 CES show, I was lucky enough to attend a private demonstration of a CD-based Sony prototype," says Brendan. "The demonstration took place in fancy hotel room well away from the show, and it was to a small group of Nintendo representatives along with a small contingent of top Rare people – and me! The demo consisted of a video streaming from the CD. I liked the concept technically, but we were not impressed with the video quality." Mike Dailly recalls that DMA was actually commissioned to produce software for the device similar to that which Brendan describes. "DMA was originally approached by Nintendo because we had a video playback engine for it. We demoed a clip of *Star Wars* playing from a 4MBcart, and they were very interested in the tech for the CD-ROM system. But it all went quiet and we started doing *Unirally* instead."

The popularity of the SNES has ensured that it is in high demand with collectors even today. Starting your own collection isn't expensive, and recent developments have lowered the barrier to entry on the more common releases. "A lot of the games have dropped in price fairly dramatically due to availability on emulators or via the Virtual Console on Wii and Wii U," says Jonathan. "US and UK RPGs still command ridiculous prices, but there are plenty of great games to be had for less than £20. The real problem is finding them in good condition – the cardboard packaging sadly doesn't fare very well if not looked after." While finding some common games at a decent price isn't going to be hard in today's market – providing you're happy with just a cartridge – the

SKYBLAZER 1994

■ A rare case of Sony Imagesoft making a decent game, *Skyblazer* is an attractive action platformer which made good use of the console's Mode 7 capabilities. Coming towards the end of the console's lifespan *Skyblazer* was perhaps unfairly ignored, and certainly deserved a 3D sequel which would have made better use of the game's flying sections.

SECRET OF EVERMORE 1995

■ Following the success of *Secret Of Mana* Square decided to found a North American studio and produce an RPG aimed squarely at western audiences. While *Secret Of Evermore* wasn't up to the standard of its Japanese siblings, it was unique compared to a JRPG. It's a shame Square didn't produce more titles of this type.

MAJYUUOU: KING OF DEMONS 1995

■ Konami's shooter was not only the perfect advertisement for the console's graphical capabilities, it also played like a dream – no small feat when you consider how unsuited the SNES was to this kind of game. Amazing music, gripping gameplay and attractive visuals make for a true classic – a sequel was hinted in the end credits, but never came.

BAHAMUT LAGOON 1996

■ One of the last great RPGs of the SNES era, this Japan-only release was tipped for a western localisation but it never happened. It has been fan-translated in recent years and is well worth seeking out, if you're happy to dabble with a spot of emulation. *Bahamut Lagoon* sold almost half a million copies in Japan but no sequel was forthcoming.

more desirable titles are rising in value. "Videogame culture is embedded in the mainstream," says Stuart. "It's lucrative now. I think the Internet has made the retro gamer's world smaller. The chances of finding a genuine bargain online are growing smaller. I can remember paying £60 for *Majyuuou: King of Demons* back in 2007 for my Super Famicom. I thought that was expensive. I've seen copies on eBay now for over £1,300."

The SNES is one of those machines that simply grows in stature as the years roll by, and there's a good chance that people will still be talking about it in respectful tones in another quarter of a century. But why did Nintendo's console make such a massive and long-lasting impact on gamers? Why is it so fondly remembered when the hardware which followed ushered in the era of revolutionary 3D realism? "It was the final hurrah of the classic era of 2D gaming," replies Brendan. "It was a high point before the shift into the modern era of 3D polygons. As exciting as the N64 and its contemporaries were at the time, those games look dated. SNES games by comparison look gloriously retro. Also, the move to 3D created a huge increase in the complexity of games and their controllers which only enhances the charm of the 16 bit era." Chris Sutherland also feels it was the system's mastery of 2D which makes the SNES so beloved. "I think it was the last home console that used custom hardware devoted to 2D sprite games," he explains. "After that there was a transition to more general purpose CPU/GPU architectures. I think that's one of the reasons it stands out – it was almost the de facto machine for creating 2D games. Later consoles could still do that, but people started to veer towards 3D as it was the new thing."

» You can use this device to connect to the Satellaview. It reminds us of the old pictures of the CD-ROM add-on.

For hardcore fans like Stuart, it's all about the software. "It introduced so many franchises for Nintendo," he concludes. "To have new games like *Mario Kart*, *F-Zero*, *Starfox*, and *Pilotwings* released within the space of a few years was exciting. There was a drive behind Nintendo in those days to try new ideas, particularly in Japan and that enthusiasm was instilled across third-party developers. Most games were coded by teams, so creativity and lack of interference was in full flow. Enix, Square, Konami, Capcom and countless others developed some truly stunning titles for the console. Recent fan translations have also breathed a new lease of life back into the console, with lots of Japanese-exclusives now being available to Westerners for the first time." So here's to the continued success of Nintendos legendary console. ✱

POUND SAVERS

Excellent Virtual Console options for those that can't collect the real deal

CASTLEVANIA: VAMPIRE'S KISS / DRACULA X

£200 (US) / £90 (JPN) / £225 (PAL) / (VC) £5.49

■ While it's not a patch on the PC Engine CD title from which it is derived, *Vampire's Kiss* is insanely collectable in its physical form, and demands a steep price for the most committed *Castlevania* fan. As such, this download is a much better choice for anyone interested in playing it.

FINAL FIGHT 3 £130 (US) £120 (PAL) / (VC) £5.49

■ The third *Final Fight* outing on the SNES may not be as refined as *Streets Of Rage 2*, but it's the finest example of the genre on Nintendo's console. Haggar returns with new allies and *Street Fighter*-style moves. Its pricey second-hand but this digital release is infinitely better value.

DEMON'S CREST £170 (US) / £125 (JPN) / £260 (PAL) / (VC) £5.49

■ A commercial disaster upon its release in North America, this spin-off from the *Ghosts 'N Goblins* series focused on Firebrand, an enemy in the original games who was elevated to hero in *Gargoyle's Quest*. A mixture of platforming and RPG, this is a true hidden gem.

MEGA MAN X2 £160 (US) / £25 (JPN) £240 (PAL) / (VC) £5.49

■ The second *Mega Man X* game is notable on the SNES as it's the only home version of the game (a cut-down mobile game also exists). It builds upon the groundwork of *Mega Man X*, being far more action-packed than the earlier NES games and quite a bit easier too.

WILD GUNS £350 (US) / £160 (JPN) / £250 (PAL) / (VC) £5.49

■ A steampunk Wild West shooter with an excellent co-op mode and some brilliant, screen-filling boss battles, *Wild Guns* is yet another in-demand SNES release which requires deep pockets to own. Thank goodness, then, for this Virtual Console release.

EARTHBOUND £500 (US) / £20 (JPN) / £N/A (PAL) / (VC) £6.99

■ Recently available on the Wii U Virtual Console, *Earthbound* is a quirky and endearing RPG which, instead of featuring the usual fantasy setting, boasts a modern world invaded by aliens. The game never got a European release, and the American version is incredibly expensive.

TOP 25 SNES GAMES

The results are in, but did your favourite SNES games make the cut? Find out in the coming pages...

SimCity

- **DEVELOPER:** NINTENDO EAD
- **YEAR:** 1991 **GENRE:** STRATEGY

25 **It may be** primarily remembered as a PC franchise but, with numerous changes and additions to this console port, it's little wonder so many of you cited it as a SNES favourite. Developed by Nintendo EAD rather than Maxis, this version has a distinct Japanese flavour and several beautiful Nintendo twists – seeing Bowser stomp through the city is up there with the greatest gaming moments. The team did a great job of making it work with a controller rather than a mouse, too.

ActRaiser

- **DEVELOPER:** QUINTET
- **YEAR:** 1990 **GENRE:** STRATEGY/ACTION

24 **The beauty of** *ActRaiser* is that it is effectively two games in one. Half god game – albeit without any direct religious references, thanks to Nintendo's hard-line self-censorship of the time – half action game, all awesome. While it's true that neither part is a dedicated example of the genres in question, it's the unique fusion that makes this so memorable. Putting town creation and management on hold to go kick some ass is something that no other game can offer.

Cybernator

- **DEVELOPER:** NCS CORP
- **YEAR:** 1992 **GENRE:** SHOOT-'EM-UP

23 **A surprisingly strong** showing in support of this shooter sees it make the list ahead of bona fide classics like *Super Punch-Out!*, but you've gotta love the underdog. It's an inventive mech shooter that really makes you feel like you're in control of a huge, complex piece of kit and it still holds up brilliantly today. The same can't be said of the budget PlayStation 2 remake, sadly – our advice would be to just stick with the original...

Zombies Ate My Neighbours

DEVELOPER: LUCASARTS
YEAR: 1993 **GENRE:** RUN-AND-GUN

22 **There's a lot** to be said for this B-movie shooter, so we're not overly surprised to see you come out in numbers to support it. The recent sad loss of LucasArts might have done something to bolster its following, but it's certainly not ill-deserved – the humour, style and tight gameplay are such that many modern developers would kill to put their name to something as polished and refined as this.

Perhaps the original great co-op game, *Zombies Ate My Neighbours* lets protagonists Zeke and Julie use anything they can find to hold off the zombie apocalypse and secure the safety of the guys and gals that live down the street. But it's not just zombies – variety here is exceptional and, over the course of the game, you'll find yourself gunning down pretty much every B-movie cliché – from giant ants to vampires and aliens. But it doesn't stop there, as the level with the gigantic rampaging baby perfectly displays. It keeps you guessing by constantly changing things up – even though gameplay changes little, that each stage can feel entirely unique is amazing.

Said variety extends beyond simply switching enemy sprites out for new ones, too. It's the weapons, an improvised arsenal comprising of everything from water pistols to rocket launchers. It's the settings, myriad slices of suburbia pulled straight out of every low-budget horror movie ever made. And it's the characters – even the titular neighbours come in all shapes and forms, with each of them worth a different amount of points if you can save them in time. Thankfully, you don't need to rescue them all but, the more you manage to free, the better your score will be. And just like most games in this genre, that's all that really matters.

"A great shooter with music to die for" **gmintyfresh**

Super Aleste

DEVELOPER: COMPILE
YEAR: 1992 **GENRE:** SHOOT-'EM-UP

20 **An excellent shooter,** as evidenced by the fact that it managed to beat the likes of *Super R-Type*, *Gradius III* and *UN Squadron*. A rich and varied arsenal is what really makes *Super Aleste* stand out, each of the eight weapons offering six different levels of power. Furthermore, each can be modified at the touch of a button, adding reverse fire (or similar area coverage) or changing properties to give options that can more or less cover every situation the game throws at you. Like pretty much every shooter, there's a problem in that death causes you to respawn with virtually no firepower – but there's a simple solution to that problem: just be better at the game. Solved.

EarthBound

DEVELOPER: APE/HAL LABORATORY
YEAR: 1994 **GENRE:** RPG

19 **It may not** have had a UK release, but that seems to have had little impact on the popularity of this glorious RPG. Perhaps offered a little more exposure thanks to Ness's appearance in *Super Smash Bros*, this quirky little title can take pride of place in any collection – mint originals now change hands for upwards of 500 quid. Why? It's one of the few retro classics not to have seen a re-release in any form, despite constant calls for it to come to Virtual Console. Still, all that is set to change now, as the cult RPG has finally been released on Nintendo's digital service. Let's see if that does anything to the insane price that original copies currently go for...

Donkey Kong Country 2: Diddy's Kong Quest

DEVELOPER: RARE
YEAR: 1995 **GENRE:** PLATFORMER

21 **If you could** all have just pulled together and decided amongst yourselves which *Donkey Kong Country* game was best, it could quite easily have made the top five. Instead, divided opinion gives us two *Kong* games in this list, Rare's platform sequel just missing out on the top 20. Quite how DK came to be kidnapped in the first place is a conversation for another time, though it's clear that Diddy and Dixie can handle themselves well enough without him. It was around this point that Rare's love affair with collectibles began, so those that have enjoyed cleaning up and finding everything in the likes of *Banjo-Kazooie* and *Star Fox Adventures* would do well to recognise where it all started.

Super Mario All-Stars

- **DEVELOPER:** NINTENDO EAD
- **YEAR RELEASED:** 1993 **GENRE:** PLATFORMER

18 **A compilation and** console bundle title it may be, but far be it from that to exclude this collection of timeless games from your list. Sporting enhanced versions of the three NES *Mario* titles as well as super-tough variant *The Lost Levels* – famously *Super Mario Bros 2* in Japan, while we received a massively modified version of *Doki Doki Panic* – this is pretty much platforming heaven. Any one of the collected games would be worthy of a spot on this list alone, so the combination of all four is pretty much a shoo-in. You could buy a console and get by for months just on the single bundled game, which is not something that can be said of any console since. Later versions also included *Super Mario World*, which you can safely expect to read more about in the coming pages. Just a guess.

Super Tennis

- **DEVELOPER:** TOKYO SHOSEKI
- **YEAR RELEASED:** 1991 **GENRE:** SPORTS

17 **Early titles are** always going to live large in the hearts of fans – they're the ones that get the most play while you're waiting for the next big game, after all. We can all but assume that's why this 1991 title earned a spot on this list, although we'd struggle to point to an earlier multiplayer sports game that we got so much enjoyment out of. Making tennis quick and fun was a masterstroke, though even the points that dragged on proved to be hugely enjoyable – that's why we saw the same arcade template applied to *Smash Court Tennis* and, later, *Virtua Tennis*. We're all for simulation but, when it comes to a quick sporting thrill, we'd struggle to name many better games than this beauty. It sure as hell beats leaping around the lounge with a remote in your hand, that's for sure.

"I loved this game so much. Good single player, fantastic multiplayer and the best sports game for me"
Nemesis

Super Bomberman

- **DEVELOPER:** HUDSON SOFT
- **YEAR RELEASED:** 1993 **GENRE:** ACTION

16 **Again, *Bomberman* would** be higher on this list if it weren't for the fact that gamers had no less than five different kinds of *Super* to consider in this case. Ignoring the fact that the console had just two controller ports, Konami elected to use an adorable multi-tap to allow for showdowns on a scale never before seen on console. Later games introduced more elements tailored to accommodate multiplayer massacres and, to be frank, we'd probably rather have seen one of these make the list than the simple original. However, there's a lot to be said for getting there first, and for all of you who voted for any of the superb sequels you can at least find solace in the fact that the little bobble-headed murderer managed to get onto the list at all. And we're glad he did – there are few better tests of pure gaming skill than a *Bomberman* face-off. Quite how this franchise wound up entertaining kart racers and sports games we'll never know – it remains one of the best and purest multiplayer experiences in the entirety of gaming.

Donkey Kong Country

- **DEVELOPER:** RARE
- **YEAR:** 1994 **GENRE:** PLATFORMER

15 **Poor old Retro.** As much as it tried its best to recapture the magic of the originals, in essence it's just not the same – the music, the design and the well judged level of difficulty were all nailed the first time around. A stunning effort by Rare.

Chrono Trigger

- **DEVELOPER:** SQUARE
- **YEAR:** 1995 **GENRE:** RPG

14 **As if this** time-hopping RPG classic wasn't going to make this list. *As if.* Any game that stars a noble frog warrior is one that we fully support, so we'll take any excuse we can get to celebrate this wonderful action-RPG from Square's archives.

Star Fox

- **DEVELOPER:** NINTENDO EAD/ARGONAUT SOFTWARE **YEAR:** 1993
- **GENRE:** SHOOT-'EM-UP

13 **This is more** than deserving of recognition for its introduction of useless gaming baggage Slippy Toad alone. It's just a shame that its pioneering 3D visuals will forever take a back seat due to the 'do a barrel roll' meme it spawned.

Final Fantasy VI

- **DEVELOPER:** SQUARE
- **YEAR:** 1994 **GENRE:** RPG

12 **Picking just one** of Square's 16-bit *Final Fantasy* games is a near-impossible choice, so well done for settling on this one. Echoes of *FFVI* can be felt in every canon game since, and its Uematsu soundtrack is enough to secure it a place on this rundown alone.

F-Zero

- **DEVELOPER:** NINTENDO EAD
- **YEAR:** 1990 **GENRE:** RACING

11 **Racing games are** boring? Yeah, nice try. A futuristic setting and amazing 3D visuals made this an unforgettable experience for everyone who played it, though it's saddening that we haven't seen a new version since the exceptional *GX* on GameCube.

"The only one in the series you need to play – best ever linear version of the game before it tried to copy *Metroid*"
davyK

Super Castlevania IV

DEVELOPER: KONAMI
YEAR RELEASED: 1991 **GENRE:** PLATFORMER

10 **Ask most people** which is their favourite *Castlevania* and, more often than not, you'll hear *Symphony Of The Night*. While the PlayStation game is a spectacular display of genre-straddling RPG action, there's a hardcore arcade purity to *Super Castlevania IV* that gives it the edge. The music, the bosses, the sheer variety... this is the stuff of legend and its reverence is far from ill-deserved. Action-platforming with a gothic slant, you could walk for miles and not find anyone who has gotten past the second level – *Dark Souls* and its ilk may claim to have created the hardcore sector, but we know better. *Castlevania* was there first. And if you can claim to have finished this, that's something that counts for a lot on your gaming CV – arcade coin-munchers have nothing on this beast.

Secret Of Mana

DEVELOPER: SQUARE
YEAR RELEASED: 1993 **GENRE:** ACTION-RPG

9 **There had to** be at least one Square RPG in the top ten and, with so many failing to get European releases, it stands to reason that this should be the one to make the cut. Three-player co-op was a unique selling point but, even without that, *Secret Of Mana* would still hold up brilliantly. This action-RPG managed to tick every box, from a unique leveling system to a great cast of characters that could be tailored to your own whim. Despite several sequels, this remains the best game in the series – the PlayStation sequel has its fans, but their numbers are feeble compared to those who would back the original. To this day, we've yet to see a truly great *Mana* follow-up and, while it's unlikely that we'll see one in this play-safe environment, it'd be a retro insta-win if Square announced a new *Mana* game tomorrow.

Pilotwings

DEVELOPER: NINTENDO EAD
YEAR RELEASED: 1990 **GENRE:** FLIGHT SIMULATION

8 **Tech demos seem** to be the order of the day lately, with the likes of Wii Sports and Kinect Adventures capturing the imaginations of millions. But this beat all of them to the punch, a showcase for the unknown power of the SNES and an early glimpse at the magic of 3D. Few could have imagined that a flight game would be the one to show off what the SNES was truly capable of, but that's precisely what *Pilotwings* did. Three-dimensional gaming wouldn't become the norm until years later, but we can't forget who planted that seed – few did it better either, to be fair. In terms of offering a unique experience, few titles can rub shoulders with *Pilotwings*. Even the N64 and 3DS updates never really managed to recapture the magic of the original, fun as they may be.

Contra III: The Alien Wars

DEVELOPER: KONAMI
YEAR RELEASED: 1992 **GENRE:** RUN-AND-GUN

7 **Anyone that throws** their hardcore weight around based on recent accomplishments like finishing *Dark Souls* or *Super Meat Boy* would do well to pop back in time and give this monster a go. Whatever you choose to call it, this is pretty much the epitome of hardcore – dudes be coming from everywhere, and all of them will kill you in a single hit. *Contra* had lost its way recently until *Hard Corps* brought it back – it's rare that a sequel nails exactly what was so good about the original but that's what Arc managed to do. The original still presents an awesome challenge and one that anyone can be proud to have conquered. Pretty much the ultimate run-and-gun game, *Contra III* exists to kick the ass of anyone who tries to play it. As you probably know. If not, give it a shot today and don't even vaguely expect to win.

"Absolutely stonking side-scrolling shooter, the game that my staunchly MD owning mate bought a SNES for"
adippm82

Super Mario World 2: Yoshi's Island

DEVELOPER: NINTENDO EAD
YEAR RELEASED: 1995 **GENRE:** PLATFORMER

6 **We have to** be honest – we thought this classic platformer would come in a little higher. But with *Super Mario World* stealing the majority of the vote, we guess it was a 'one or the other' mindset in most cases. Either way, this dino-themed sequel performed admirably and, while we wouldn't want to have to make a pitch as to which was the better game, the egg-tossing love this game has received pretty much does that for us. Platform games don't come much better than this, especially when they don't involve the bugs or bandicoots that have come to define the genre.

Street Fighter II Turbo

DEVELOPER: CAPCOM
YEAR RELEASED: 1992 **GENRE:** BEAT-'EM-UP

3 **If you owned** a SNES and had a second controller, chances are you doubled up for the opportunity to show your mates what a Dragon Punch or a Flash Kick was. *Street Fighter* was *the* go-to competitive game at the time and, while we've since learned to play on stick, that wasn't really an option back then. Capcom did an incredible job of bringing the arcade experience home – there are few better coin-op conversions than this one and it was this kind of perfect port that made your friends with a Mega Drive incredibly jealous.

Super Metroid

DEVELOPER: NINTENDO R&D1/INTELLIGENT SYSTEMS
YEAR RELEASED: 1994 **GENRE:** ACTION/ADVENTURE

5 **Few games have** laid out their stalls quite so well as this. *Super Metroid* basically doesn't say a word, but it doesn't need to. If anything, that's the joy of it – the mystery is what keeps you playing and, even when you know what you're doing, this is not an easy world to explore. Setting the template for an entire sub-genre, this can happily claim to be one of the most influential games ever made. The recent Virtual Console Wii U re-release has given us such greats as 'Y can't Metroid crawl', cementing it as one of the great work-it-out-as-you-go-along games out there…

Super Mario Kart

DEVELOPER: NINTENDO EAD
YEAR RELEASED: 1992 **GENRE:** RACER

4 **Another obvious choice,** although it'd take a real Blue Shell enthusiast (there's no such thing) to claim that *Mario Kart* was a fair way to settle disputes. Still, few would argue that this wasn't one of the great multiplayer games of our time, especially in the age before the game-breaking Blue Shell came into play. Multiplayer rivalries can still be settled with this tried and tested method, although many cite more recent games – *Double Dash*, *MK7* and even the Wii version – as the best. There's no right answer... well, okay, there is. And it's not *Mario Kart 64*.

The Legend Of Zelda: A Link To The Past

DEVELOPER: NINTENDO EAD
YEAR RELEASED: 1991 **GENRE:** ACTION-RPG

2 **Arguments will rage** until the end of time as to which of Link's adventures is the best (ironically, it's *definitely* not *Link's Adventure*) but it's this seminal title and *Ocarina Of Time* that most often find themselves tussling for the top spot. While the 3D debut was unquestionably a masterpiece, it likely wouldn't have existed at all had it not been for this beautiful and surprisingly open RPG – it might have offered slightly more direction than the NES original but it still managed to feel like you were lost in a strange world with only your wits (well, those and whatever tools you could loot from dungeons) to rely on. The reveal of the Dark World ranks up there with the best gaming surprises of all time. Eat your heart out, Kojima…

"I remember staying up all night at a friend's house playing it and taking forever to figure out that you needed to light a lamp to open up a door"
Soulstar

Super Mario World

DEVELOPER: NINTENDO EAD **YEAR RELEASED:** 1990 **GENRE:** PLATFORMER

1 Nintendo's mascot was always going to be a clear favourite to claim the top spot on this list, but the landslide took even those of us expecting a moustachioed number one by surprise. Mario didn't just walk this list – he grabbed a Cape Feather and flew over the top of the whole damn thing.

With *Super Mario World* appearing as a pack-in with many console bundles, this would have been the first experience of 16-bit gaming for many people. And what a way to start – it'd be like your first taste of meat being a huge T-bone steak, or your first car after passing your test being a Ferrari. This is seen by many as being as close as we've come to platforming perfection and, truth be told, we're in no position to argue. We still play *Super Mario World* regularly to this day and we're *still* discovering new tricks and secrets hidden away in the many, many stages.

There's so much to talk about in celebration of *Super Mario World* that it's difficult to know where to begin. But, we'll start as is logical – with pretty much the first thing you see when starting up the game. The map structure isn't entirely new, with *Super Mario Bros 3* pulling much the same stunt albeit broken down by level. But, it's the improved sense of scale that comes from having one big map that really makes this feel like an epic journey, and one where the route – and even the destination – aren't always clear. Find a hidden exit to a stage and you can find yourself branching out into areas far more difficult than you're used to. But, with so many routes on offer, there's no shame in returning to the beaten path in order to hurry along your journey to Bowser's castle.

Then, there's the way that each of the power-ups changes how you approach and traverse each stage. A cape will let you soar up to hidden cloud platforms if you can get the speed up to get lift in the first place, while a fire flower lets you muscle your way past many obstacles. There are even a few situational pickups (such as the one that turns Mario into a balloon) to use and abuse, though it's definitely the trusty mushroom that will see the most use. You can even keep one of these back in reserve – useful if you know you'll need it later in a tricky level and don't want to risk losing it along the way.

Whether or not there's such a thing as a perfect game is an argument that will never be won. Whether or not *Super Mario World* is the closest thing we've seen to one, though? That's not even up for debate.

What Makes It So Super

Hidden Exits
If you've got the right power-up and an explorer's spirit, there are loads of secret ways to end levels prematurely. Doing so can open up new paths that let you speed across the world map, as Star Road fans will know

Dino Might
Yoshi eggs are hidden away in many of the blocks scattered around *Mario World*, and unleashing the beast is always a joy. Not only does he offer you an extra hit, there are also certain areas that you simply can't reach without him

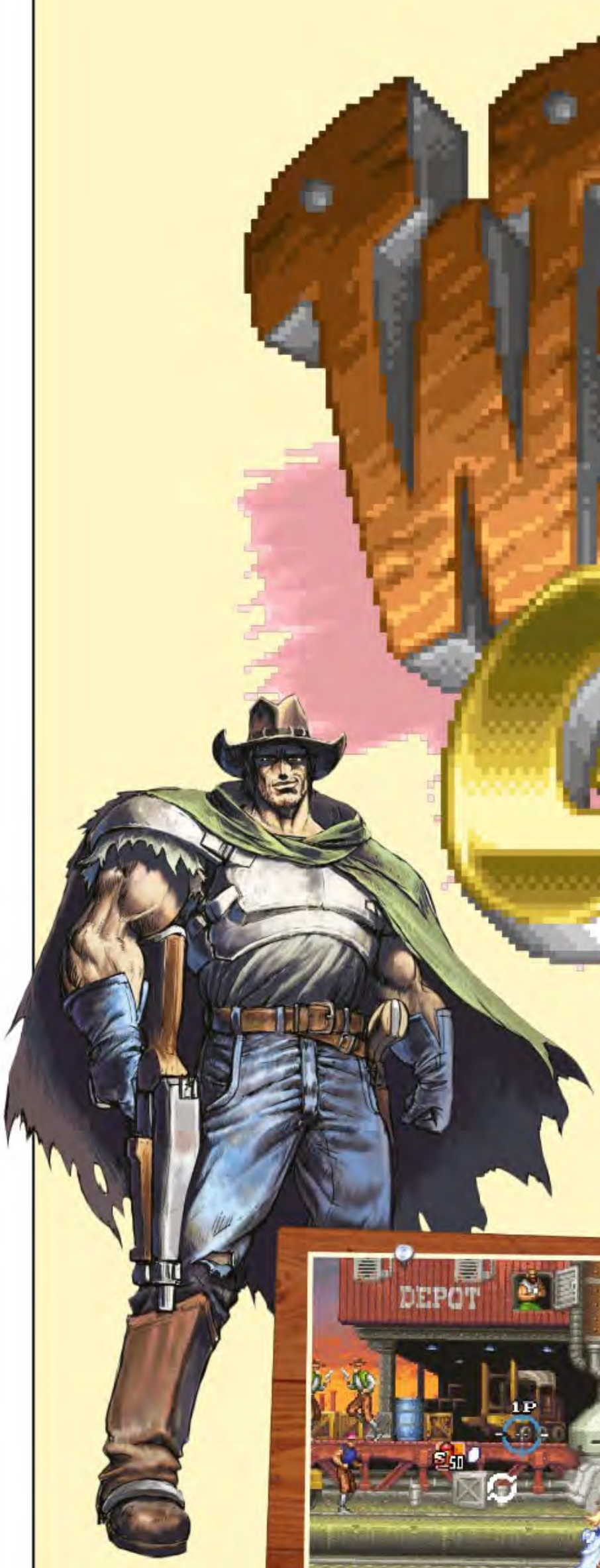
Perfect Design
Variety counts for a lot, though it's the fact that there's no weak link that proves the most amazing. Whether swimming, soaring, riding or climbing, *Super Mario World* never so much as misses a beat

Star Power
Soaring above the world is Star Road, a set of super-tough stages with secret exits on every one. If you know where to find the lot, you can finish the entire game in less than ten minutes

Endless Replayability
So many exits, so many routes, so many tiny little secrets to find... there's just so much to this game that, as we said, we're still finding new power-ups and hidden areas to this day. As close to the perfect platformer as you can get, basically

"Boundless creativity and invention, pixel perfect level design, fiendish puzzles and power-ups that changed the dynamic of play"
Wools

Wild Guns



» The start of the ammo depot stage. There's a lot of dynamite flying about.

In an alternative universe, the West was won by battling a giant green-eyed robot from the rooftop of a saloon. Retro Gamer looks behind the scenes of the recently reloaded cult SNES shooter Wild Guns

Those of you of a certain age may recall the old animatronic Western-themed shooting galleries found at amusement parks in the Eighties and early nineties. Packed with intricately arranged Americana, primed to react in various amusing ways when you hit them with your imaginary Winchester '73, they were so densely packed with stuff to shoot at it boggled the mind. *Wild Guns* is a bit like that, except with cyborg gunslingers instead of Uncle Zeke in his rocking chair with a jug of moonshine. Set in an alternative steampunk Wild West of neon hoardings and huge mecha bosses, it's a lightgun game without lightguns, evoking arcade shooters like *Cabal* and its semi-sequel *Blood Bros.*. Packed with impressive anime-style graphics and imaginative character and boss design, the game introduced us to grizzled bounty hunter Clint and plucky saloon girl Annie, battling their way through hordes of metallic cowboys in an attempt to bring down the gang that killed Annie's parents. And for our money, it's the finest game of its type on the Super Nintendo console, and quite possibly, any other platform too.

Wild Guns was developed by Japanese software studio Natsume, probably best known in the West as the publisher of the *Harvest Moon* farming RPG

IN THE KNOW

- **» PUBLISHER:** NATSUME/TITUS (EU)
- **» DEVELOPER:** NATSUME
- **» RELEASED:** 1994
- **» PLATFORM:** SNES
- **» GENRE:** ACTION

» The local saloon is a hangout for lowlifes, outlaws, and cyborg bartenders.

WILD GUNS RELOADED

Natsume's remaster of *Wild Guns* surprised many when it was first announced in 2016 for the PlayStation 4, but it proved to be quite a draw when demonstrated at the E3 and other gaming events that same year. To all intents and purposes its the same SNES game that those lucky enough to get to play first time round will remember, but it's been completely overhauled for widescreen HD systems with improved detail (especially noticeable in the rendering and animation of bosses) and a completely remixed soundtrack. Two new characters, Bullet the dachshund, with his floating drone pal, and Doris, a crazy grenade-throwing lady, have been added, which both play very differently from the original Clint and Annie. The game also now supports local co-op multiplayer for up to four people. Even better, *Wild Guns Reloaded* includes two all-new stages derived from ideas the team had at the time of the original game but couldn't implement, namely a subterranean base plus a spectacular assault on a fleet of airborne battleships. There's also a new laser weapon, which proves a lot of fun to use. Unfortunately there's no online multiplayer mode, which feels like a bit of an oversight. And there isn't a European physical disc release, unlike North America, meaning it feels a bit expensive at £24.99 for the download. Having said that, though, that's peanuts compared to what the SNES version will set you back nowadays.

"We felt that the game wouldn't be flashy enough with only the Western setting"

Toshiyasu Miyabe

franchise. The bulk of the project was created by a small three-man team, game designer and graphic artist Shunichi Taniguchi, programmer Toshiyasu Miyabe, and musician and sound designer Hiroyuki Iwatsuki. It was the result of a request from Natsume for an original game that could be completed quickly and cheaply. The development time for the game was a surprisingly short five months.

"At the time, Taniguchi-san liked the arcade game *Dynamite Duke* and I was a big fan of the arcade game [and the similarly Western-themed] *Blood Bros.*," remembers Miyabe. "So we thought about making a similar pseudo-3D shooting game. Since it's a shooting game that uses guns, the Wild West setting was only natural. However, we also felt that the game wouldn't be flashy enough with only the Western setting, so we added the sci-fi elements." Adding futuristic elements, inspired in part by the manga *Cobra*, turned *Wild Guns* into something quite unique, giving it the feel of something akin to a cross between the old *Wild Wild West* TV show and the Saturday morning anime *Battle Of The Planets*. Throw in an epic Morricone-style soundtrack, including a riff cheekily lifted straight from *The Good, The Bad and The Ugly*, and it's fair to say the team ended up with something rather special.

Wild Guns appeared relatively late in the life of the SNES console, debuting in 1994 in Japan, North America a year later, and only making it to European stores in 1996. When work began, the trio had recently completed an update of Taito's *The Nnja Warriors* for the SNES, and were keen to continue on the platform, despite the onset of the new generation of gaming machines including the upcoming PlayStation. "We had experience working on the SNES and were all set with the development environment and tools," explains Miyabe. "We really wanted to try and master development on the SNES rather than spreading out our resources learning a new system."

A lot of the development time was devoted to fine-tuning the controls. The playable characters, Clint and Annie, were named after a suggestion from Natsume's American office, no doubt inspired by legendary sharpshooter Annie Oakley and a certain low plains drifter. Originally each character's gunsight was locked horizontally, with the player only being able to move it up and down and by moving their onscreen avatar left or right. After this version proved understandably ▶

» Boom! That'll learn him.

» To get into the gold mine you need to take down this Stetson-wearing robot gunslinger. And he'll be back.

» Original concept art for Clint and Annie.

difficult to play, the control system was switched to allow independent movement of the crosshair in relation to Clint or Annie. "Coming up with a good control method using the buttons of the SNES was tough," admits Miyabe. But what resulted was a flexible system, using only three buttons, allowing Clint and Annie to jump and roll their way out of danger, shoot, lasso and freeze enemies (by double tapping the fire button), and trigger a screen-clearing dynamite blast when things got a bit hairy. The lasso dynamic turned out to be particularly useful in two-player co-op sessions, allowing one player to momentarily stun enemies and even bosses while the other concentrated on taking them down with munitions.

Because the pseudo-3D depth of the screen sometimes made it difficult to determine the precise location of enemy bullets, the team also added a pop-up 'look out!' speech bubble to help players better keep track of incoming fire from the bad guys.

"We always kept in our mind about how to avoid unreasonable or unfair deaths, and the answer to this was to add a signal that lets the player know that a bullet was coming towards their character," Miyabe explains. "We were able to achieve this game balance, however, at the same time it created some tricky bugs that gave us a hard time to fix."

One of the game's many neat touches is the fact that nearly everything rendered in such beautiful pixel art can be destroyed, or at least visibly ridden with bullet holes. This includes most of the backgrounds, where bottles break, signs smash, barrels shatter, objects catch fire, and more. "The destroyable backgrounds were difficult, but what really gave us a hard time was the fact that we had to create [all] the 'destroyed' graphics by hand," Miyabe reflects. "But we wanted to give players an exciting and exhilarating

BOSS RUSH

GIANT MECH

■ This armoured robot comes equipped with an enormous Gatling gun and shoulder-launched missiles, meaning you don't want to make him angry. His weak spot is his head, so blast it until it pops off so you can head into the bar for a celebratory bourbon.

DESERT TANK

■ Possibly the most visually impressive boss in the game, this eight wheeled monstrosity features rotating axles and turret, and a screen-filling flamethrower. Not great when all you have for protection is a revolver and a blue cotton bonnet.

CRAB GUARDIAN

■ It's possibly surprising to find a crab in the middle of Nevada given its arid climate, but hey ho. He's a sort of crustacean Smaug, guarding the treasures of the gold mine stage, and he likes to freeze you before stomping on you with his big pincers.

» This shooting gallery stage pops up as a bonus level in the Japanese version. It's also available as a minigame.

feeling when they played the game, as well as give them the catharsis of destroying various objects. Also, because the levels don't scroll in any way, we concentrated on how we could increase the gameplay using just one screen. And to increase the feeling of the Wild West setting, we added a heat haze effect. I came up with this idea after seeing *RoboCop 3*!"

It was important to the team that *Wild Guns* was an enjoyable co-op two player game, and indeed this is one of the title's most enjoyable features. There's nothing quite like taking down a hulking great robot or a massive flame-throwing tank in the middle of the Arizona desert with a buddy. "Our main goal was to surprise the player, and we emphasised the size of the bosses and their attack methods," says Miyabe. Care was taken to ensure that each of the boss fights was challenging but fair, and that targets and weak points were easily visible, highlighted by flashing indicators when hit. *Wild Guns* even makes it easier to practice the stage and boss of your choice by allowing players to select the order in which they tackle the middle four areas of the game, which include a gold mine, an ammunition factory and a moving armoured train.

Due to being released towards the end of the life of the SNES, *Wild Guns* didn't make a huge impact at the time, despite positive reviews praising its gameplay, visuals and sound. However, in retrospect, the game has taken on the mantle of bona fide cult classic, with

> **"We've seen it being sold for more than 100,000 Yen in Japan!"**
> Toshiyasu Miyabe

copies changing hands on Ebay for surprisingly large sums, something which hasn't escaped the notice of Miyabe."Yes," he laughs, "we've seen it being sold for more than 100,000 Yen [about £700] in Japan, and, of course, we each have a copy for ourselves!"

Fortunately, there are several other ways to get to play *Wild Guns* these days, and the game stands up surprisingly more than two decades on, retaining its fun playability, and feeling as timeless as Gene Wilder in *Blazing Saddles* and Jane Fonda in *Cat Balou*. The title was rereleased on the Virtual Console for Nintendo's Wii in 2010, the Wii U in 2014, and more recently a remastered version, *Wild Guns Reloaded* was launched on the PS4, with plans for a PC port via Steam to be released later this year. This new version features updated widescreen HD graphics coupled with classic gameplay and stages from the original, along with two all-new characters, simultaneous four player co-op, and two bonus levels inspired by ideas that never made it into the SNES version.

"When we started development on *Wild Guns Reloaded*, we were anxious about whether a retro-looking game would fit in today's market," says Miyabe of the project that reunited the original trio to reprise *Wild Guns* for modern audiences. "However, looking back on what we have created, we felt that the same essence and core enjoyment was there even after 22 years." As to why the game was released as a PS4 exclusive, Miyabe explains: "We had the console we wanted to release the game on in our mind when we started, and because this game was made by just the three of us, we concentrated on one platform."

The new characters in *Wild Guns Reloaded* are distinctly different from Clint and Annie, who played all but the same bar for one of them wearing a dress. Bullet is a small sausage dog with a floating robot drone, while Doris is a lady who likes to rely on explosive grenades. "It was really difficult to finalise Doris and Bullet, but we always had in our mind to make these new characters have a different style of play from Clint and Annie," says Miyabe.

True to its roots on the SNES, the team was keen to ensure the retro influence extended to other areas of the remaster. "When we made the new music, we actually started by making songs using the SNES sound source," he reveals, "and then arranged it like we did with the other music in the game."

We mention to Miyabe that despite its lack of popularity when it first arrived, it feels like his game is finally being recognised for its unique and enduring appeal amongst retro-minded fans. "Well, firstly, thanks for the compliment," he replies. "As for us, we feel like there are hardcore fans of the game, but, frankly speaking, the three of us don't feel like it's that popular!" But then, you could say that about the film *Once Upon A Time* in the West. And that's terrific. ✱

» "Annie are you okay? Are you okay Annie?"

CYCLOPS BOT

■ This glassy-eyed terror droid pops up at the end of the ammo depot level and has a mean ability to freeze you on the spot before peppering you with bullets if you're not careful. Luckily, shatterproof glass hasn't been invented yet in the Wild West.

ARMOURED TRAIN

■ This stage of *Wild Guns* is one of our favourites, as you scoot along the roof of rumbling carriages, blasting the enemy on an unexplained parallel track. Looking like a giant hovering sandcrawler this boss is very *Star Wars*, except for being a train.

GANGBOSS KID

■ The final boss is the head of the Kid family that killed Annie's parents, and he reminds us a bit of Dr Loveless in *Wild Wild West*, by inhabiting a giant robot/ship thingy. Shoot his minions and gun sentry towers then blast him. Revenge is yours.

Top Gear

THE NEED FOR SPEED

» SNES » GREMLIN GRAPHICS » 1992

If *Top Gear* looks a little familiar to you it's because it shares a lot of DNA with the rather excellent Lotus series, which was originally a hit on 16-bit computers such as the Amiga.

Like *Lotus Esprit*, *Top Gear* features a split-screen mode, regardless of whether you're playing on your own or against a friend. It feels annoying initially, as if you're wasting precious screen space, but you soon get used to it, particularly as the racing itself is so satisfying and everything runs at a tremendously fast pace. The music is also connected, with musician Barry Leitch (who worked on some of the earlier *Lotus* games) remixing a selection of classic *Lotus* tunes to great success. The original tracks were good, but they sound even better here, punchier and bassy with excellent stereo effects and great engine sounds that really put you in the heat of the action.

Gameplay-wise, *Top Gear* is pretty conventional, essentially consisting of circuit racing across eight different countries. Each available country consists of four races, meaning there are 32 in total, creating a quite substantial game – so substantial in fact that Gremlin included a handy password system. While it's not always obvious that you're racing in the country in question, the tracks themselves are excellent, with plenty of challenging twists and turns. Four different cars are available, all of which play differently to each other, while the need to pit on some of the bigger tracks adds an exciting risk vs reward element, particularly when playing against another player. *Top Gear* was succeeded by two sequels, both released for SNES, but the original game will always remain our favourite. ✱

» RETROREVIVAL

NINTENDO ARCHIVES

Snowboard Kids
NINTENDO 64
Nintendo

NINTENDO 64

THE SUCCESS OF THE NES AND SUPER NINTENDO CEMENTED NINTENDO'S POSITION AS THE INDUSTRY'S LEADING CONSOLE PUBLISHER. FUELLED BY ITS OLD DOMINANCE, NINTENDO ATTEMPTED TO CONTINUE ITS STRANGLEHOLD ON THE MARKET, BUT STIFF COMPETITION FROM SONY'S PLAYSTATION MEANT THE TIDE WAS ABOUT TO TURN...

Many gamers are convinced that Nintendo's 64-bit console was a complete failure for the company - those gamers are wrong. While it is hard to deny that there were a number of factors that resulted in Nintendo being dethroned by Sony by the time the N64 was phased out. The innocent victim in all this was the console itself; it was a great machine with some unbelievable games, but it was hamstrung by certain corporate decisions and never really fulfilled its potential. However it was not the flop many others label it as either.

Project Reality was first hinted at as far back as 1993, the name coined from Nintendo's new relationship with Silicon Graphics and its workstations being used to great effect in films such as *Terminator 2* and *Jurassic Park*. The following year saw the arcade machines *Killer Instinct* and *Cruis'n USA* released that were touted as using the same technology that would soon be available in your own home. In hindsight, the arcade machines were vastly overpowered by comparison, but no one was to know that and anticipation surrounding Nintendo's next console grew.

It wasn't until November 1995 that the new console, dubbed the Ultra 64, was finally unveiled at the annual Shoshinkai exhibition to great expectation. Only two of the 11 games shown were playable; one was *Kirby Bowl*, which would disappear into development hell shortly afterwards. The other was *Super Mario 64*. The playable demos available were all that was needed to convince the attendees that Nintendo still had the magic.

Part of that was due to the design of the controller. Nintendo is known for producing ergonomic devices that are focused on getting the best out of its own games, and for the N64 this was no different. Designed by Genyo Takeda, the controller had three prongs, offering three different holding positions and hence the possibility of varying control schemes all wrapped up in one unit. Sitting on the middle prong was an analogue stick, a device unfamiliar to many people at the time. This design choice was about to change the way videogames were made forever.

The controller was better than that of the competition, but it took time to learn how to use it. The same could be said for the console itself. When announced, terms such as "Z-buffering", "tri-linear mip-mapping" and "Gouraud shading" both wowed and confused the

New... or old?

Many groundbreaking features of the N64 touted by Nintendo were not as new as first thought. The N64 itself was labelled the first 64-bit console, though technically the Atari Jaguar had already gotten there first with its object processor. It was not the first console either with four controller ports as the Bally Astrocade and Atari 5200 had this feature in the pre-crash era. And that analogue stick sitting prominently in the middle of the controller? Many people believe Sega had pre-empted Nintendo's decision with its release of *NiGHTS* (bundled with such a controller), but the game was released in Japan two weeks after the N64 launched. Nonetheless both the Atari 5200 and Vectrex had an analogue stick as standard. What can be said for sure is that the inclusion of this feature has influenced the design of all future controllers since.

> "THE PLAYABLE DEMOS AVAILABLE WERE ALL THAT WAS NEEDED TO CONVINCE THE ATTENDEES THAT NINTENDO STILL HAD THE MAGIC"

64 Didn't Deliver

The 64DD unit, or Dynamic Drive, was Nintendo's attempt at a proprietary media format that could rival the capacity and flexibility of the CD used by Sony's PlayStation. First previewed in 1995 before the N64 had even launched, it was delayed beyond recognition and when it finally did arrive in 1999, had lost all the momentum and impetus that it promised.

Not only were games being designed to run from the unit directly, but many companies were planning upgrade disks that could be accessed by the cartridge version to add new features, missions and content to the main game. With the delays, all bar one of these was cancelled; the one survivor, the *F-Zero X* Expansion Kit, happened to be almost worth buying the unit for regardless.

During its one-year lifespan only nine pieces of software were released for the unit, and in conclusion can be considered the only Nintendo hardware failure alongside the Virtual Boy.

public in equal numbers, and many magazines sought to explain these words to their readers. Whilst these features and more were to prove the power of the N64 was greater than that of the PlayStation, they also provided one or two serious end-user flaws.

The largest complaint levelled against the N64 is how quite often, the graphics appear as if someone has smeared Vaseline across the screen. This blurry appraisal was in contrast to the often jagged and pixelated look on the PlayStation; the N64's mip-map and anti-aliasing techniques helped smooth out textures when they moved closer or further from view, but the restrictions on storage with cartridges and a very low texture cache meant these textures were often blurry as a result. Nintendo itself often chose to use the Gouraud shading to compensate for the lack of texture definition.

> "AT THAT POINT, SUPER MARIO 64 HAD BEEN SOLD WITH ALMOST EVERY CONSOLE"

Clever tricks to get around some of the limitations, together with rewriting parts of the graphics processor microcode meant that the true power of the N64 could shine through. Developers such as Factor 5 and Rare were especially adept at getting the most from the machine. In conclusion, like most other consoles, those developers willing to put the effort into learning got the most from it, as witnessed in the end result of the games they released.

As early as 1994, Nintendo had started to assemble a group of programming teams that would be responsible for producing some of the early N64 games, that would inevitably give them a head start in getting the best from it. Aside from Williams and Rare who produced the previously mentioned coin-ops, others courted included simulation specialists Paradigm, Acclaim, Sierra, Lucasarts, and Electronic Arts. Notice anything about the companies listed? None of them were Japanese. A costly oversight at the time? Maybe so looking back. Perhaps Nintendo believed Japanese companies would automatically come on board. The reality was to prove a lot different. Either way, even with the head start, it took longer than expected for any of the third parties to fully push the machine.

Even Nintendo itself wasn't immune to running late. The N64 had originally been scheduled for a 1995 release, and when a definite date of 21 April 1996 was finally decided upon, it shifted two more months due to the realisation that certain titles, such as *Mario Kart 64*, were not going to make the first wave of releases, and Miyamoto wanting more time to fine-tune *Super Mario 64*.

April 1996 incidentally had been the planned launch date in the UK. This slipped back to March 1997 as the US release was planned and orchestrated. The PlayStation was already out and Nintendo UK ran a series of adverts telling people to wait for the arrival of the N64. At the time it was still called the Ultra 64, the "Ultra" part apparently dropped in due course due to the name being owned by Konami.

When the console did launch in Japan, the PlayStation had already been on sale there for 18 months. The launch games were similar to that of its predecessor, the Super Famicom, in that it involved a *Mario* title and a *Pilotwings* game. The other title available that day was a version of *Shogi*, a game very much Japan-centric in nature.

And that was it. Until the release date of the console in the US was approaching, there was no other software released in Japan, which was somewhat worrying from a promotions and publicity point of view. *Super Mario 64* may have been an epic, brilliant, groundbreaking title, but if people wanted something else to try on their new system, they were a little stuck, to the say the least. Not that Nintendo had much to worry about the success of the console at that point; *Super Mario 64* had been sold with almost every console, and by the end of the N64's lifespan, had shifted more than ten million copies, making it the most successful N64 game ever.

With the launch of the console in September in the US coming up, Sony raised the competition stakes slightly by dropping the price, a common tactic, of the PlayStation to under $200. However Nintendo seemed to panic, and in response dropped the price of the N64 pre-launch by 50 dollars from its original proposed price of $249.99. The same could not be said of the console launch in the UK; Nintendo resolutely stuck to its price of £249.99, which at the time made it 60 per cent more expensive than it could be bought for in the US.

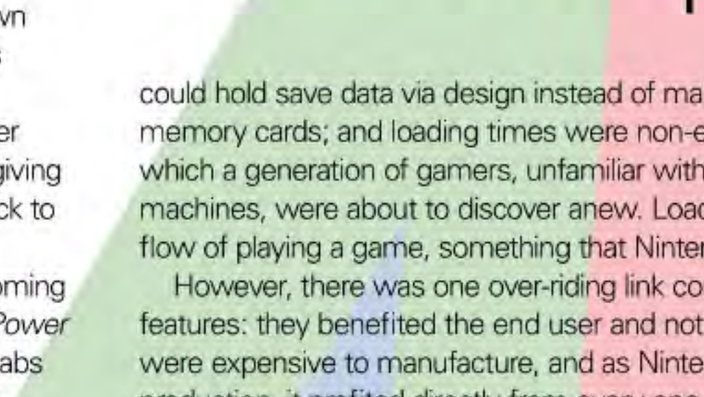
What a lot of people bought a N64 for in the first place.

Nintendo ads tried to persuade people not to buy a PlayStation.

Guns, girls, gigantic set-pieces, what more could you want?

Worthy of purchase merely for the Katina level, but brilliant overall in all respects.

A new entry in the series gained a whole new set of fans, but many SNES fans were disappointed by comparison with the game.



Take the simple board game concept, throw in a whole load of mini-games into the mix and Nintendo's characters, and the result is an entertaining party game. Which has since been milked to death.

Originally conceived as a powerboat racer, once it turned into a jetski simulation it gained a more personal quality with the controls being perfect and the wave simulation incredibly accurate.

Realising its folly soon after, the price was dropped 100 pounds a few months after launch, heralding scores of furious complaints from early adopters. Nintendo attempted to placate them with vouchers covering the difference, which was mildly received. It wasn't the only reason why being a PAL N64 owner at the time was the equivalent of getting a sharp stick repeatedly up the backside, for reasons that will be touched on later.

What can't be denied is the quality of some of Nintendo's own games. Examples of its great games include: *Starfox64* with its marauding levels, challenge, addictiveness and the sheer film inspiration of the Katina level; *Waverace 64* with its superb water physics and bouncy gameplay; *F-Zero X* for taking the original, giving it a serious rocket from behind and a real heavy metal soundtrack to boot; *Pilotwings 64* for being so wonderful to play.

Three new series also made their debut on the N64, all becoming instant hits. *Super Smash Bros* was Nintendo's answer to the *Power Stone* genre of multi-player fighter, but with the spark of HAL Labs at the helm, made it a unique creation of backstabbing brilliance. *Paper Mario* meanwhile was a different take on the turn-based RPG concept with plenty of nuances and invention to back up the gameplay. Finally *Mario Party* combined board games with mini-games and the chance to wreck your analogue stick in the process.

And then there are the *Zelda* games. *Ocarina Of Time* was constantly delayed but proved to be a tour de force of concept, idea and execution that has justified it to be labelled repeatedly as the best game ever. *Majora's Mask* on the other hand has been unfairly overlooked by comparison, which is a shame because in some ways, it even trumps *Ocarina*. The relationships and bonds formed within the three days left before the moon strikes are some of the strongest ever produced from a game, and it really hits home when you realise just what the ending actually means.

Nintendo had its own popular games, the powerful hardware, and the new controller. There was just one piece missing from the equation: third-party support. Why was third-party support so lacking on the N64 compared to their two previous consoles? One of the main reasons lies in the choice of remaining with a cartridge media format instead of using optical as Sega and Sony had.

Not that cartridges didn't still have advantages: they were more robust than CDs, less likely to be damaged via general use; they could hold save data via design instead of making the user buy memory cards; and loading times were non-existent compared to CD, which a generation of gamers, unfamiliar with loading tapes into 8-bit machines, were about to discover anew. Loading times disrupted the flow of playing a game, something that Nintendo were keen to avoid.

> "THERE WAS JUST ONE PIECE THAT WAS MISSING FROM THE EQUATION: THIRD-PARTY SUPPORT. WHY WAS THIRD-PARTY SUPPORT SO LACKING ON THE N64 COMPARED TO ITS TWO PREVIOUS CONSOLES?"

However, there was one over-riding link connecting all these features: they benefited the end user and not the publisher. Cartridges were expensive to manufacture, and as Nintendo still controlled their production, it profited directly from every one made. Cartridges were also harder to pirate, which is likely to be another reason for sticking with that format. They also held far less data than CDs could, so publishers were in effect being asked to support a console that had a far higher space-to-cost ratio than, say, the PlayStation.

Then there were the licensing fees. Sony had been smarting for years over Nintendo's betrayal regarding the proposed CD peripheral for the SNES. Not wanting to cancel the project outright, Sony decided to continue research and build around what it had already created, with the end result being the PlayStation console we know today. Sensing an opportunity, Sony organised its licence fee structure (the money publishers have to pay to be allowed to release their games on a machine) on a much lower scale to Nintendo.

When you look at everything together, the cost of manufacture, the cost of licensing, the difficulty in getting the best out of the console, it isn't hard to see why third-party publishers made a beeline for the PlayStation compared to the N64. It was far cheaper and easier for them to publish videogames all of a sudden. Their decision was made by the actions of both manufacturers. Edge magazine even predicted many of these factors in an article soon after the N64 launch. This situation was further escalated by the choice made by a certain Japanese company with a certain RPG.

NINTENDO 64

"THE N64 IS PROBABLY WHERE THE ADAGE 'YOU BUY A NINTENDO MACHINE FOR NINTENDO'S GAMES' BEGAN"

» **Above:** *Bangai-O*: the original, and some would say, better version of the panic-inducing shooter fest.

Software availability from certain publishers and of certain established series is a key factor today towards a console's success. In hindsight it did not matter that the N64 probably had a far better good-to-bad ratio of games in its library; it was the sheer volume of releases at a cheaper price for the PlayStation plus the presence of certain key games that tipped the balance.

Looking at the major third-party publishers during the Nineties, there were wide differences in their output between the N64 and the PlayStation. Capcom and Namco managed a whole three releases each for the N64: a shockingly low level of support. Konami by comparison released 20 or so games, which seems pretty impressive, until compared to the more than 50 released for the PlayStation. Even the king of third parties, Electronic Arts, only managed a similar number of releases.

The biggest blow to Nintendo's fortunes was the loss of Square. Towards the end of 1995, several screenshots were published which were purportedly taken from the next *Final Fantasy* game. That's how the journalism went. In fact they were from a technical demo Square had written to test various three dimensional techniques. Unfortunately no one knew this at the time and huge anticipation built when it was assumed Square were on board and were writing the next *Final Fantasy* game for a Nintendo machine, just like it had for the previous six.

When Square announced in January 1996 they were instead going to be publishing *FFVII* on Sony's PlayStation, the collective jaws of Nintendo fans dropped. As it turns out, Square had never planned on publishing *FFVII* on the N64. Early on in development it was decided that the requirements of the game needed a much larger media capacity than cartridge allowed. Square's decision in hindsight was elegantly simple to make, but it didn't stop the accusations against Sony that it had "tied up" Square in a deal to take it away from Nintendo. Square had dealt the N64 a massive blow before it had even been launched.

With *FFVII* scheduled to be released on the PlayStation, other publishers knew that the console would sell in droves just so people could play the game, and this in turn gave them more confidence and knowledge that there would be lots more potential buyers for their games if they also released on the PlayStation. In a way, it was a self-fulfilling circle of cause and effect. Sony also marketed its console towards a different audience from the norm, complete with advert saturation; by comparison promotion for the N64 seemed quite small. Nintendo arrogantly assumed people would automatically go to buy its console regardless, which they did, but more people were flocking to the PlayStation for the games it offered and the "wow" factor that FMV provided via the new CD medium.

With a narrower selection of parties publishing on the N64, it meant that certain genres were neglected, which affected sales levels. For example, role-playing games are huge business in Japan and there are hardly any available for the N64. Likewise fighting games. By comparison the range of sports games available for American fans was sufficiently large to keep them happy. In fact, the US is what really kept the console alive, as it accounted for two-thirds of the worldwide sales, and it managed to sell half of what the PlayStation achieved in that region.

The N64 is probably where the adage 'you buy a Nintendo machine for Nintendo's games' began. Given the magnitude of many, they were worth the entry fee alone and anything else was a bonus. Of the developers who did write for the N64, one stands out above all others: Rare. Having wowed games players with their SNES releases, it was about to pull even bigger rabbits out of an even bigger hat. Put simply, you can't underestimate just how important Rare's games ended up being towards the success of the N64.

From the regal beauty and genius of the *Banjo-Kazooie* games, the addictiveness of *Diddy Kong Racing*, to the offbeat destructive nature of *Blast Corps*, and the frantic bug blast of *Jet Force Gemini*, Rare games were held in vast esteem and rivalled the releases of Nintendo itself. Indeed in some ways, *Banjo-Kazooie* and *Diddy Kong Racing* supersede the games they were based upon. Sitting right at the top of the tree however is *GoldenEye*, which was a tour de force of programming, showing that consoles could do the FPS genre and give gamers a multi-player experience that was incredibly hard to let

» This is the gaming equivalent of having your brain sucked out through your eyes. Explosively quick, superbly playable and playing a full-on heavy metal soundtrack.

» What might have been if Square had decided to remain with Nintendo.

» If you haven't heard of *The Ocarina of Time*, there's not much hope for you. Simple, sublime, beautifully brilliant.

» As a game *Majora's Mask* wasn't as epic as *Ocarina*, but it somehow created even more emotion and atmosphere than its predecessor.

» Football (or soccer) may not be that huge in the US, but they received all three N64 *ISS* games with region-specific artwork and design. The game still played brilliantly as always.

Bear, bird and big-eyed characters. It's bound to be another Rare classic.

Sin & Punishment was an incredible offering from Treasure and is one of the best Japanese exclusives you can buy.

Rare's *Diddy Kong Racing* had a single player mode that was far more entertaining than what was featured in *Mario Kart 64*. The multiplayer was pretty good as well…

Bugs and blasters ahoy as Rare do the third-person shooter fest in another example of how to get the most from the N64 hardware.

The ambitious sequel to *Goldeneye*, that delivered in spades but was just perhaps a little too demanding on the hardware.

go. It is rightly heralded as not only one of the best N64 games, but one of the greatest of all time. Not bad for a team where many of the developers were doing their first ever game.

Of the major third-party publishers, Konami was probably the most prolific and consistent in its support of the N64, with versions of *Castlevania*, *Goemon* and *ISS* appearing on the machine amongst others; *ISS98* especially should be singled out for praise as being the best console football game available until the *Winning Eleven* series started to become known in the West. Konami's sports game contribution was large in general, probably helping the console's performance in the US.

Other developers were just as notable on the N64 even though their releases weren't quite as prolific as Konami. Left Field programmed a couple of good basketball games, licensed with Kobe Bryant, and the excellent *Excitebike*. Camelot transferred its superb golf series across to make *Mario Golf*, and then went on to produce the equally good *Mario Tennis*. Factor 5 produced two *Star Wars* games that almost pushed the N64 to its limit, and then went further and programmed the did-not-think-it-possible *Indiana Jones* and the Infernal Machine. Special word of course must go to the doyen of development, Treasure, which managed to produce its usual wizardry in creating three masterpieces of mayhem, namely *Mischief Makers*, *Bangai-o* and *Sin & Punishment*. All three are well worth finding and buying purely for their unbridled quality.

Towards the end of the N64's life, Nintendo belatedly released the 64DD unit in Japan (see boxout) and a 4Mb RAM expansion pack designed to double the available memory of the console and allow more demanding titles to be written. Only a few games in the end actually needed it (though many benefited from its presence) but these include *Majora's Mask* and *Perfect Dark*, two of the classics. By the end of 2001, the N64 was all but dead with the release of the GameCube, though *Tony Hawk's Pro Skater 3* did make it out in the US in August 2002.

If you missed out on all the N64 fun back then, now is a great time to get into the machine. There is just one consideration though when choosing to buy: do not get a PAL machine. Not only can it not be modded for RGB, but many PAL games suffer from no optimisation at all, meaning those large black borders and much slower speeds also experienced with the SNES. By comparison, buying the US version is probably the way to go, as it can play Japanese games with the removal of the tabs inside the slot and it had available just about everything released in Europe and much more. The N64 is currently something of a cult machine, with a dedicated band of supporters who are gradually winning over people who dismissed it at the time.

> "ANY CONSOLE THAT SELLS OVER 30 MILLION UNITS WITH MANY TRULY GREAT GAMES CANNOT RATIONALLY BE CALLED A FAILURE"

In fact, many people consider the N64 to be a failure, especially when compared to the performance of the PlayStation, which has to date sold more than 100 million units. However any console that sells over 30 million units worldwide and has many games present in the bestselling and greatest ever games lists cannot rationally be called a failure. Nintendo revolutionised three-dimensional gaming and controllers via the N64, and it has an abundance of classics waiting to be discovered if you haven't done so already.

SPECIAL THANKS TO Lost Levels for the image of N64 *Final Fantasy VII*.

iQue Test

China has always been one territory that console manufacturers traditionally steer clear of due to the rampant piracy present within the country. Nintendo decided to try to break into the market with the creation of the iQue Player, released towards the end of 2003. On the outside it looks like the offspring of the N64 and Dreamcast controllers, but inside it uses console-on-a-chip technology to provide an N64 playing experience.

Games are stored on a 64Mb flash card contained within a cartridge that slotted into the device, which connected directly to the TV in a similar way to all those pirate rip-offs you see being sold on street markets. The games were available from an 'iQue depot' where they could be downloaded onto the cartridge. The unit was successful enough that Nintendo has released other versions of its more recent hardware in China to similar effect.

TOP 25 NINTENDO 64 GAMES

Retro Gamer readers have cast their votes and top developers have had their say – these are your top 25 games on Nintendo's groundbreaking console. Join Nick Thorpe for the countdown...

Developer Top Picks

Blast Corps

"I remember when *Blast Corps* came along – the crew was gathered around an N64 saying, "No way! How are they doing that?" I love seeing creativity and innovation in gaming, and *Blast Corps* didn't just manage to do it on a technical level, but they innovated along the lines of the actual game design"

Doug TenNapel
(Earthworm Jim, The Neverhood)

Jet Force Gemini

DEVELOPER: RARE **YEAR:** 1999
GENRE: THIRD-PERSON SHOOTER

25 **Kicking off your** top 25 is the first of many Rare games. *Jet Force Gemini* combines elements of platform and shooting games, both genres in which the developer was proficient during the N64 era. As a result, you'll have a lot of exploring to do as you seek to push back the forces of Mizar, the game's antagonist. Customisable multiplayer modes round off an accomplished package, as is common for Rare games.

International Superstar Soccer 64

DEVELOPER: KONAMI COMPUTER ENTERTAINMENT OSAKA
YEAR: 1997 **GENRE:** SPORTS

24 **Konami's follow-up** to its SNES hit *ISS Deluxe* was a huge presentation upgrade, taking advantage of the N64's power. Aided by the inclusion of some hilarious commentary, the new 3D visuals greatly enhanced the game's sense of realism. And while the game didn't feature real player names, it was easily a match for *FIFA 98: Road To The World Cup*.

Excitebike 64

DEVELOPER: LEFT FIELD PRODUCTIONS
YEAR: 2000 **GENRE:** RACING

23 ***Excitebike*'s return in** 2000 was as welcome as it was unexpected, with the series having largely lain dormant since the 1984 debut of its NES precursor. The dirt track racing proved a good fit for the move to 3D, and the addition of mini-games and a track editor gave the game real longevity. Unfortunately, *Excitebike 64*'s release was delayed until the N64's mid-2001 decline in the UK, perhaps explaining its low position in your chart.

Beetle Adventure Racing

DEVELOPER: PARADIGM ENTERTAINMENT
YEAR: 1999 **GENRE:** RACING

22 **Even the greatest** of games can look like losers on paper – after all, "an Italian plumber goes running and occasionally jumps on turtles" is the no-frills description of one of the most important games of all time. So it is that we come to *Beetle Adventure Racing*, a licensed racing game in which players can only choose a single model of car – but unlike the likes of *Ferrari F355 Challenge*, the single model is a modest economy car. However, in spite of a distinctly unexciting premise, *Beetle Adventure Racing* delivers a surprisingly good experience.

The key word in the title is "Adventure" as the game's six tracks has a distinctive theme, from the Egyptian-themed Sunset Sands to the quintessentially English Coventry Cove. *Beetle Adventure Racing* is a game in which you'll rarely stick to the track, too. In a similar fashion to arcade racers such as *GTI Club* and *Hydro Thunder*, each track is filled with shortcuts and alternative routes, allowing players to crash through barns, tear down narrow side streets and even drive through caves. These secret routes often hide items, from nitro boosts to points used to unlock extra arenas in the multiplayer Beetle Battle mode.

Diddy Kong Racing

DEVELOPER: RARE **YEAR:** 1997
GENRE: RACING

21 **15 years before** Sonic and his mates raced each other across land, sea and air, Rare busted out planes and hovercrafts in an attempt to claim *Mario Kart*'s throne. Depending on the course, players could choose either of these vehicles or karts, with drivers such as Banjo and a pre-booze Conker joining Diddy Kong on the starting grid.

The real strength of *Diddy Kong Racing* lies in its excellent Adventure Mode, which provides a satisfying single-player experience unlike that offered by *Mario Kart*. Winning regular races unlocks boss races, beating bosses opens up coin-collecting challenges, and so on – there's a hell of a lot to do over the game's 30 courses before you ever get any other players involved.

Super Smash Bros

DEVELOPER: HAL LABORATORY **YEAR:** 1999 **GENRE:** BEAT-'EM-UP

20 **The N64 is** one of the all-time great multiplayer consoles, in part due to Nintendo's shrewd inclusion of four controller ports on the console, and party-oriented games like *Super Smash Bros* helped to cement that reputation by allowing Mario, Pikachu, Link and Samus to beat each other up.

The key to the wide appeal of *Super Smash Bros* is its deliberate avoidance of fighting game conventions. The game's violence is cartoonish, the controls are simple and even traditional life bars are discarded, in favour of a percentage system that has no definite knock-out point. Platform-based stages and randomly generated items mix things up further, creating a chaotic environment in which everyone has the potential to win a round.

"I'd never played anything quite like it before, nor have I since. The combination of the great characters, writing, music and quirky Japaneseness (it's a word) make it a very unique experience"
Nathan Wind

Mystical Ninja Starring Goemon

DEVELOPER: KONAMI COMPUTER ENTERTAINMENT OSAKA
YEAR: 1997 **GENRE:** ACTION-ADVENTURE

19 **While Goemon and** chums starred in three N64 adventures, it's the first one that makes the cut here. This action-adventure follows the titular hero and his companions Ebisumaru, Yae and the mechanical ninja Sasuke, as they try to work out just who was behind a UFO attack which turned the Japanese Oedo Castle into a European-style castle.

This is one of the more surprising entries in your top 25, as sales weren't tremendous and critical reception was mixed. However, it has cult appeal – the game's medieval Japanese setting and bizarre sense of humour give it a unique boost.

Paper Mario

DEVELOPER: INTELLIGENT SYSTEMS **YEAR:** 2000 **GENRE:** RPG

18 **Much like Square's** SNES outing *Super Mario RPG*, *Paper Mario* drops Mario and his friends into a role-playing game with an eye-catching visual style – indeed, *Paper Mario* was announced as *Super Mario RPG 2*. But where the SNES game tried to punch above its weight with pre-rendered 3D visuals, the N64 game goes in the opposite direction, with every character represented as a lovingly drawn paper-thin cut-out instead.

Though it operated a menu-based combat system, *Paper Mario* included an active element in battles with the use of the 'action command' system – button presses timed with attacks or guards would increase the effectiveness of your attacks, elaborating on *Final Fantasy VIII*'s implementation of a similar system. However, it was the setting rather than the mechanics that made *Paper Mario*, with the Mushroom Kingdom coming alive thanks to Goomba families, a green-eyed Luigi and Bowser's unceasing belligerence.

Pokémon Snap

DEVELOPER: HAL LABORATORY/PAX SOFTNICA
YEAR: 1999 **GENRE:** PHOTOGRAPHY

17 **A first-person rail** shooter of a rather different kind, *Pokémon Snap* challenges players to shoot photos of Nintendo's collectable critters. You play a Pokémon photographer who travels through a variety of environments in a small rail cart, taking photos which are then scored by Professor Oak. Higher points are awarded for keeping the Pokémon in the centre of the frame, catching it doing interesting things and getting more than one of the same species in shot.

It's a simple game, but one enhanced by the level of interaction afforded by items which can be thrown – food will lure Pokémon in for better shots, while pester balls will make them angry and extract them from hiding places. While the selection of Pokémon featured is pretty small at just 63 of the original 151, their interesting animations and the diversity of the game's seven courses hook players easily.

1080° Snowboarding

DEVELOPER: NINTENDO EAD **YEAR:** 1998 **GENRE:** SPORTS

16 **Nintendo EAD isn't** traditionally thought of as a great developer of sports games, but *1080° Snowboarding* isn't a traditional Nintendo EAD game. While Japanese staff made up the bulk of the team, the coding was handled by two Englishmen, ex-Argonaut programmer Giles Goddard and Colin Reed, who has most recently been working on the *Forza Motorsport* series. Compared to contemporary snowboarding games like the *Cool Boarders* series, *1080° Snowboarding* took a more realistic approach to the sport, placing a greater emphasis on technical aspects such as correctly landing after tricks.

That emphasis on realism carried over to the game's visuals, and *1080° Snowboarding* was graphically incredible upon release. Sunlight was reflected in the snow in a manner quite unlike anything else seen at the time, characters didn't exhibit the joints between limbs that were common in so many other games, and there was even a little lens flare on the camera. The gameplay was equally impressive, thanks to level designs which included hidden routes and a variety of natural places to perform tricks, securing *1080° Snowboarding*'s status as an unexpected but undisputed hit.

"I love the way it concentrates on racing rather than tricks, the sunsets and reflections look great, even the menu was fun. You also get to play as a panda"
Fightersmegamix

Conker's Bad Fur Day

DEVELOPER: RARE
YEAR: 2001 **GENRE:** PLATFORM

15 *Twelve Tales: Conker 64* didn't stand out from the crowd when it was announced, so Rare extensively retooled its planned family-friendly platformer into the tale of a foul-mouthed alcoholic squirrel. The changes clearly worked out – after all, who can forget their first encounter with the Great Mighty Poo?

Lylat Wars

DEVELOPER: NINTENDO EAD
YEAR: 1997 **GENRE:** SHOOT-'EM-UP

14 **Better known as** *Star Fox 64* elsewhere (including the 3DS update), this on-rails shooter bundled the N64's Rumble Pak peripheral. The game expanded on its SNES predecessor by offering free-flight boss areas. It also gave us the "do a barrel roll" internet phenomenon...

WWF No Mercy

DEVELOPER: AKI CORPORATION
YEAR: 2000 **GENRE:** BEAT-'EM-UP

13 **The best wrestling** game ever? It could be – fans still love its refined grappling system over a decade later. *No Mercy* perfectly encapsulates the popular Attitude era of the WWF, and is packed with big names like The Rock, Stone Cold Steve Austin and The Undertaker.

Pilotwings 64

DEVELOPER: NINTENDO / PARADIGM ENTERTAINMENT
YEAR: 1996 **GENRE:** FLIGHT SIMULATOR

12 **Just as *Pilotwings*** had demonstrated the Mode 7 backgrounds of the SNES, *Pilotwings 64* is a spectacular demonstration of the 3D environments that the N64 offers. Using a jetpack and hang glider in the main game is fun, but the bonus cannon event remains our favourite.

Perfect Dark

DEVELOPER: RARE
YEAR: 2000 **GENRE:** FIRST-PERSON SHOOTER

11 **Trying to top** the success of *GoldenEye* was an unenviable task, but one which Rare set out to achieve with this sci-fi shooter. As a late release that utilised the N64's Expansion Pak accessory, *Perfect Dark* boasted substantially improved visuals over its predecessor.

"Rare at the height of its powers. Powers that would extend throughout its N64 canon, in fairness, but this is the kind of original concept that's missing from Nintendo's consoles today"
Team Alfie

Blast Corps

DEVELOPER: RARE **YEAR:** 1997 **GENRE:** ACTION

10 **Smashing things is** fun. That isn't an opinion, that's a universal truth known even to babies, who giggle as they clumsily knock over their building blocks at nursery. *Blast Corps* recognises this fact, and gives the player the opportunity to smash buildings in a multitude of ways. This usually has a purpose, such as clearing a path for a nuclear truck, but you'll never care too much about that because the fun of demolition is always your primary concern.

The vehicles on offer allow players to demolish buildings by sliding the tail of a truck, attacking from the side with extending arms and even just charging straight in. But our favourite is the jetpack, which allows you to soar into the air before raining down destruction upon the helpless concrete constructs.

Banjo-Kazooie

DEVELOPER: RARE **YEAR:** 1999 **GENRE:** PLATFORM

9 **We've already seen** the last of Rare's N64 platformers pop up in this list, and the first joins it here. *Banjo-Kazooie* was one of the games which gave Rare a formidable reputation for crafting 3D platform games, and for good reason. The dynamic duo of a bear and a bird employed a variety of different techniques in their quest to rescue Banjo's sister Tooty.

Drawing on Rare's design work on the *Donkey Kong Country* series for the SNES, item collecting was a huge part of *Banjo-Kazooie*, to the point that the pause screen tracks seven different types of pick-ups as well as displaying your life and energy. Each stage is packed with things to do as a result, making the game a dream for both intrepid explorers and completion fanatics.

"Treasure was on fire with this one, just technically astounding – the carrier level lived long in the memory"
adippm82

Sin & Punishment

DEVELOPER: TREASURE

YEAR: 2000 **GENRE:** SHOOT-'EM-UP

8 **The N64 wasn't** popular in Japan, where it finished in third place behind the Saturn, and there are few essential import games as a result. But if there's one game that made owning an import-ready N64 worthwhile, it was *Sin & Punishment*. Treasure's game is much like a 3D *Cabal*, with the N64 pad allowing you to move and aim independently. As an arcade-style blaster the game is on the short side – a proficient player can beat it in less than two hours – but it's packed full of bosses and set-pieces that ensure you'll return to it. *Sin & Punishment* is now available to international audiences, as it was translated and released on the Wii's Virtual Console.

Wave Race 64

DEVELOPER: NINTENDO EAD

YEAR: 1996 **GENRE:** RACING

7 **Sometimes, a game** does just one thing so well that it has the potential to overshadow everything else in the game. In *Wave Race 64*, the sequel to a tame top-down racer for the Game Boy, that thing was water. No other game captured the look and feel of racing on water in quite the same way and while it might not have retained the visual impact it had in 1996, *Wave Race 64*'s water physics remain hugely impressive.

The rest of the game is impressive too, due largely to excellent track design. It doesn't have the exuberance of a game like *Mario Kart 64* or *Diddy Kong Racing*, but it does boast some spectacular graphical effects.

F-Zero X

DEVELOPER: NINTENDO EAD

YEAR: 1998 **GENRE:** RACING

6 **If you've never** played *F-Zero X* before, you might be looking at it here and wondering what all the fuss was – and is still – about, but allow us to put your doubts to rest. The game looks incredibly sparse, but this deliberate visual restraint allows it to convey an unrivalled sense of speed at a high frame rate. Moving into 3D visuals allowed Nintendo EAD to experiment with some crazy anti-gravity track designs that just weren't possible on the SNES, with players racing inside and outside of pipes, as well as around full loops. There's even a random track generator, which extends the game's lifespan far beyond other racing games.

Developer Top Picks

Mario Kart 64

"I remember playing it in four-player mode at the King Of The Jungle offices and wanting to murder anyone that red-shelled me! It was manically addictive in multiplayer mode, and definitely an office favourite for a while. Nothing better than getting the invincibility star and squashing all your mates"

Raffaele Cecco
(Exolon, Stormlord)

The Legend Of Zelda: Ocarina Of Time

"Life just ground to a halt for two or three weeks while I completed the game. The simplicity of control with the wide variety of things you can do is just what I want from a game like this. Miyamoto at his best once again"

Jon Ritman
(Match Day, Head Over Heels)

Wave Race 64

"I used to be a programmer for many years, so when games appeared that were technically spectacular, I not only appreciated them on a gameplay level but on a 'how the heck did they do that?' level. *Wave Race 64* had me scratching my head as the simulation and feel of zipping across really choppy water was excellent"

David Perry
(Earthworm Jim, MDK)

Diddy Kong Racing

"It was a great game to be involved with, and I loved the twist of the added storyline and adventure element. It wasn't just a racing game, but had a little of everything. The Rare sense of humour, and the cross between *Mario World* with a racing genre, just made it exciting and new"

Kevin Bayliss
(Killer Instinct, Diddy Kong Racing)

GoldenEye 007

"If I'm only allowed one, it's clearly *GoldenEye*. I was so addicted it quite literally caused *Alundra*'s release to be late. I kept thinking about it when writing the English version of *Alundra* and taking breaks to play it, which turned into a diversion of an hour or more every time"

Victor Ireland
(Lunar: The Silver Star, Alundra)

Mario Kart 64

DEVELOPER: NINTENDO
YEAR: 1996 **GENRE:** RACING

5 **Hands up: how** many of you have sworn over being blasted with lightning on the Wario Stadium jump? Quite a few, we're guessing. *Mario Kart*'s multiplayer has always drawn out a variety of emotions, creating memories that have propelled the game into your top five.

The first 3D *Mario Kart* game introduced many recurring elements of the series, including mini-turbos for drifts, fake item boxes and the dreaded leader-seeking blue shell, while removing the CPU-only special items found in *Super Mario Kart*. But for all of these improvements made to the already sterling formula, the biggest upgrade came from the hardware itself – amazing four-player split-screen multiplayer.

"I know most people will prefer *Ocarina Of Time*, but *Majora's Mask* proved that the series could take a turn to the dark side, and do it so well"
gunbladelad

The Legend Of Zelda: Majora's Mask

DEVELOPER: NINTENDO EAD
YEAR: 2000 **GENRE:** ACTION-RPG

4 **Few games have** a more compelling premise than that of *Majora's Mask*. Faced with the impending disaster of a falling moon that will obliterate Termina in just three days, Link must travel back and forth in time to save the world. Dungeons follow the excellent template set out by *Ocarina Of Time*, but other mechanics take centre stage in *Majora's Mask*. With control over time allowing the player to work out the daily routines of the townspeople and a variety of masks to affect their reactions to Link, the game features a deeper level of interaction with other characters than prior *Zelda* games.

GoldenEye 007

DEVELOPER: RARE **YEAR:** 1997 **GENRE:** FIRST-PERSON SHOOTER

3 **Miles in front** of the fourth-placed game is Rare's N64 masterwork. It might have arrived two years after the film, but that didn't hurt this James Bond tie-in one bit – after all, it would have been churlish to criticise the timeliness of a game this good.

The key to Rare's approach was a flexible adherence to the movie's script. Stages were crafted from very small sequences of the film or even made up entirely. What's more, the game's excellently designed stages included a variety of objectives that could be tackled in the order of the player's choosing, giving a sense of freedom that was uncommon in games of the time.

But the single-player mode is only half the story. Given the longevity it lent to the game, it's surprising that multiplayer wasn't a key part of the game's design from the beginning. The mode was added late in development, but proved to be an important selling point for the console as well as the game – the superb deathmatch mode was the perfect advert for the N64's four control ports, and helped to cement the system as the machine of choice for multiplayer fanatics.

While Rare would later develop its first-person shooter template further with *Perfect Dark*, readers have remembered the impact that *GoldenEye* had upon release. As well as being a rare example of a worthwhile movie licence, the game proved that consoles could host first-person shooters that were at least as good as those on PC, if not better. Keyboard warriors could keep *Quake* – N64 owners were too busy crowding around the TV for split-screen *GoldenEye*.

"It absolutely nailed the atmosphere of being James Bond, from the comedy enemies to the ricocheting bullet sounds and the awesome music – somehow it's much closer to the movie feel than most Bond games that followed"
Qazimod

The Legend Of Zelda: Ocarina Of Time

DEVELOPER: NINTENDO EAD
YEAR: 1998 **GENRE:** ACTION-RPG

2 **Only narrowly missing** the top spot is the first 3D *Zelda* game, one of the greatest games ever designed. Link's fifth quest sees him once again taking on Ganondorf, seeking to prevent him from obtaining the Triforce and dooming Hyrule. The move to 3D granted the series an unprecedented sense of scale, which hits players the first time they set out across Hyrule Field – this was a huge world with lots to experience, from riding the horse Epona to entering the pit of Jabu-Jabu's belly. Time is the game's key mechanic, with Link appearing in both child and adult forms, each with different abilities – young Link can crawl through small spaces, while adult Link can use the hookshot, for example.

Much like *Super Mario 64*, *Ocarina Of Time* provided key advances in the design of 3D games. Rather than turning the game into a hybrid puzzle-platformer, Nintendo gave Link the ability to jump automatically as he reached platform edges, allowing the player to work out the puzzles without worrying about control. In order to ensure that players could fight battles adequately, Z-targeting was introduced, with players holding the Z button to lock on to an enemy and make movements relative to its position.

It isn't quite perfect – Nintendo notably addressed the design flaws around the Water Temple in the 3DS version of the game – but it's as close as anyone had seen in 1998, and launched to universal acclaim, selling over 7 million copies. As a result, *Ocarina Of Time*'s design has formed the basis of every 3D *Zelda* game released since. Those sequels have made the formula familiar, but *Ocarina Of Time* was an utterly groundbreaking game, an expansive and engrossing adventure that played like a dream – a game truly worthy of the word "epic".

Super Mario 64

DEVELOPER: NINTENDO EAD **YEAR:** 1996 **GENRE:** PLATFORM

1 ***Super Mario 64* isn't** just a great game – it changed gaming forever. For players, it was a rare treat. 2D *Mario* platformers had been straightforward affairs – even if there were hidden exits to find and a variety of abilities for Mario to use, the aim of the game was usually still to make it from your starting point to a single finishing point. *Super Mario 64*'s levels were wide environments designed for exploration, and the whole game changed around that fact. Staple enemies like Goombas were suddenly much easier to avoid and became more of a minor hindrance than a serious threat, in part thanks to Mario's new health meter. Goals, rather than being points at which the level finishes, were now tied to objectives – beating bosses, collecting red coins, winning races and so on. Each stage had multiple goals, and the sight of a well-placed star outside of your objective often caused players to pause and try to figure out how to reach them ahead of time. This non-linearity extended further, as the stars opened up new stages in batches, meaning that it was hard to ever become truly stuck.

For developers, *Super Mario 64* was a masterclass. Despite a lack of prior experience with 3D game design, Nintendo delivered a full slate of impressively designed levels, filled with challenging and inventive objectives. Even the simple act of moving Mario was a joy – the N64's boldly different control pad gave many players their first taste of the subtleties of analogue control, with a light push producing a slow tiptoe and a heavy push producing a full-on sprint. That wasn't all, as Mario gained new abilities like the triple jump and backflip, which proved useful for leaping those hard-to-cross gaps. Particularly pleasurable was the act of trying to force Mario up a hill, watching his legs working ever harder until he fell forward and slid back down.

The platform genre had a variety of competing designs in the early days of 3D, from conservative 2.5D efforts such as *Pandemonium* to the idiosyncratic approach of *Jumping Flash*. However, it's easy to forget this, as *Super Mario 64* quickly rendered almost all of them obsolete and subsequent games such as *Banjo-Kazooie* and *Gex 3D* borrowed heavily from its design. Design features we now take for granted, such as dynamic cameras, owe a heavy debt to the work of Shigeru Myamoto and his team.

All of this, and *Super Mario 64* was a launch game. It was an almost impossibly convincing reason to buy the console on day one, which remained compelling years after the hype had faded. Yes, this is your top N64 game – but there's a strong argument to be made that it is the best game ever, too.

Five Reasons Why It's Great

1 It didn't just clone the 2D gameplay, instead adapting the *Mario* experience to a 3D environment.

2 The non-linear progression left players spoiled for choice when choosing the next stage to challenge.

3 The game's precise control was unlike anything else available, instantly justifying the N64's analogue stick.

4 Sliding down an icy slope while racing a penguin remains one of gaming's greatest joys.

5 Even after you had collected all 120 stars, there was still one last secret to find...

Developer Top Picks

"My favourite is *Super Mario 64*, although my kids at that time were devoted to *Pokémon Snap*"
Trip Hawkins
(Founder, EA and 3DO)

"The one that stands head and shoulders above the rest is *Super Mario 64*. It was absolutely revolutionary, getting so many things right on its first attempt and even now, three generations later, it's still as playable as it was back then"
Steve Ellis
(GoldenEye 007, Perfect Dark)

"My memories of seeing and playing it for the first time still make me smile. The design of it, the controls, the feel, the characterisation of Mario, the accessibility, the wide appeal are all things that stand out to me and make it such a fun game to play"
Mark Edmonds
(GoldenEye 007, Perfect Dark)

"If this game was released in its current form today it would still be just as well received as it was on release day, and that's the biggest compliment I can give it. I'm not sure you could say the same about any other N64 game. That's not to say they're bad – it's just that *Mario* is *that* good"

look at it sideways

82
100

Turok: Dinosaur Hunter

FOG THE DINO HUNTER

» N64
» IGUANA ENTERTAINMENT
» 1997

Before becoming famous for blowing dinosaurs away in videogames, Turok was a comic book hero. His first ever appearance was in a comic anthology that was published in Fifties, before he was selected to appear in his very own comic series two decades later.

First a hero of Western Comics, then of Valiant and then of Acclaim Entertainment when Valiant was purchased by the games publisher in 1994, Turok has had an unsteady upbringing, and it would be fair to say that his games have been equally wavering.

After acquiring Valiant, Acclaim looked at its properties and decided which would translate best to a videogame. *Turok* naturally stood out. The first N64 game by Acclaim, its development hit delays – missing its original September 1996 release date, rumoured to be due to bug fixing, and finally seeing a release in January the following year. A popular early release for the N64, *Turok* was one of the first games (maybe even the first in fact) that I played on the machine. What I still remember most about it were its fog-choked visuals, which actually worked to the game's favour as it made spotting those prowling dinosaurs all the more tense and challenging. Also, I remember that cool way you could kill enemy soldiers by shooting them in the neck. This would cause them to grasp the bullet hole and then gargle their last breaths as blood spurted from their neck. Overall, the visuals and presentation were of a high standard, with believable, clear water to swim in, polished enemy animations and imposing-looking dinosaurs to hunt.

The open world design was also something that made *Turok* stand out for me, as previous first-person shooters (well, the ones I had played) always took place in and around buildings. *Turok* was a different beast though, its world felt more expansive, and as a result more deadly. In fact, though later games have failed to better the original (and its sequel *Seeds Of Evil*), going forward I feel the series could certainly do much worse than take a leaf from the N64 game's book, and create a new instalment where your most challenging enemy isn't predatory dinosaurs but the environment.

GAME BOY ADVANCE

Nintendo's miniature marvel has been entertaining gamers since 2001. Damien McFerran takes a look back at the innovative 32-bit handheld which delivered arcade and console-standard gaming on the go

The problem with runaway commercial success is that it's often tricky to repeat the magic a second time, but Nintendo is a company which has a track record of bottling lighting on multiple occasions. The Game Boy – and its sibling, the Game Boy Color – managed to shift a staggering 118 million units worldwide, effectively ensuring Nintendo's dominance of the portable gaming arena for over a decade. Carrying that success into a new generation of hardware was never going to be easy, especially as Nintendo was feeling pressure at the close of the millennium from mobile gaming rivals such as SNK, Bandai and even mobile phone stalwart Nokia. The Nintendo faithful needn't have worried, though – the console which the company pushed to market to deal with these threats was capable of effortlessly securing another half-decade of near-unchallenged triumph, even if it did take a couple of timely hardware revisions to become the truly definitive article.

Rumours regarding a successor to the monochrome Game Boy appeared in the press as early as 1996. Dubbed 'Project Atlantis', this mythical 32-bit system was RISC-based and boasted a colour screen, and it was later assumed that this is what eventually ▶

VANCE

▶ became the Game Boy Advance. However, a rumoured 1997 release date (a year before the Game Boy Color arrived) and the promise of N64-level visuals would suggest that this was not the console that would find its way to market in 2001. When Nintendo did eventually release a 'proper' successor to its Game Boy, it was rather more conservative than the rampant speculation would suggest. "There were rumours, even back then, that Nintendo was working on a mobile phone and handheld console hybrid," elaborates former *C&VG* editor Paul Davies. "I think we knew that the new Game Boy would be at Space World that year, so we made sure to book tickets. I just wanted something that was as good as SNES but portable, if I'm honest."

That's pretty much what we got. The Game Boy Advance may have utilised a 32-bit CPU, but it remained a 2D machine at heart and employed many of the same technical tricks which had been so effective on the SNES. "The hardware specs were great – relatively speaking – so it was a really nice system to develop games for," recalls former Probe, Crawfish and Hotgen staffer David Leitch, who worked on both the Game Boy Advance and its forerunner the Game Boy Color. "The biggest change was that it was also powerful enough to write most – if not all – of the game in C, whereas on the Game Boy Color and earlier handheld systems you were pretty much obliged to use assembly language. [Nintendo] enhanced the aspects that seriously limited what you could do on the Game Boy Color. For example, there were more sprites, more playfields, more background characters. It had hardware scaling and rotation, transparency effects and probably some more stuff that I've forgotten. It was kind of like having a SNES or Mega Drive in handheld form."

» Some Game Boy Advance titles are almost unplayable on the original model, as the lack of screen lighting made dark visuals hard to see.

The Game Boy Advance made its Japanese debut in March 2001, sporting a landscape screen orientation which set it apart from Nintendo's previous handhelds, but wasn't without precedent – the company's Game & Watch handhelds often used this form factor. French designer Gwénaël Nicolas and his Tokyo-based design studio Curiosity Inc. were employed to come up with the design, which combined elegant grey lines with an ergonomic body. Compared to the boxy Game Boy and more compact Game Boy Pocket and Game Boy Color, the Game Boy Advance was quite a departure from an aesthetic standpoint, but it retained the toy-like charm that had made the range so iconic. Beating inside the console was a 32-bit ARM7TDMI CPU heart, clocked at 16.8 MHz, while the 2.9-inch TFT screen showcased the system's impressive visuals. Launch titles like *F-Zero: Maximum Velocity* and *Castlevania: Circle Of The Moon* were certainly a step-up from what players had become accustomed to on Nintendo's previous handhelds, but the company was keen to maintain a link between the generations so the Game Boy Advance boasted backwards compatibility with Game Boy and Game Boy Color games. This proved to be instrumental when it came to selling the new machine to concerned parents, as it avoided the problem of an expansive library of games becoming surplus to requirements overnight. By keeping the name and maintaining support for older games, Nintendo was sending the message that this console was an inclusive upgrade.

For all of the refinements that the Game Boy Advance brought to the table, it had its shortcomings. That otherwise-striking TFT screen lacked a light, which made it hard to play the console unless you were directly underneath a source of illumination. "You had to sit under the best light source possible to even see what was going on," says Paul. "I played loads of *Castlevania* and *Metroid* on it and took it everywhere with me, but

» *Metroid Fusion* was a stellar addition to the *Metroid* series, it's also notable as, to date, it's the last game in the *Metroid* timeline.

when visiting my parents' house the only room I could really play was the kitchen, sat on a dining chair under the fluorescent light!" Some early Game Boy Advance games – the aforementioned *Castlevania: Circle Of The Moon* being a notable example – were rendered almost unplayable in dimly-lit environments due to the dark nature of the visuals. To combat this issue a series of bulky bolt-on peripherals were produced by third-party manufacturers which aped the equally laughable add-ons that typified the Game Boy era in the early Nineties. Another negative was the lack of a rechargeable power source; like its aging forerunners this new system was reliant on AA batteries, which did at least last for an impressive 10 to 15 hours before replacements were needed. Even so, there was a feeling within the industry that it was high time that rechargeable batteries were incorporated into handheld consoles; the rise of the mobile phone proved conclusively that the technology existed to create such power cells and place them in small pieces of technology.

BEGINNING TO BLOOM

Despite its shortcomings, the Game Boy Advance continued the commercial success of its predecessors and although quality original software was rather slow to appear, it began to build up a formidable selection of games. Early remasters, such as *Super Mario Advance*, *Final Fight One* and *Super Ghouls 'N Ghosts*, certainly scratched a nostalgic itch and were impressive for

HARDWARE VARIANTS

The many faces of the Game Boy Advance

GAME BOY ADVANCE

■ Launched in 2001 and offering a landscape rather than portrait orientation, the Game Boy Advance was a significant step-up from the Game Boy Color, Nintendo's previous handheld console. However, the lack of an illuminated display and the reliance on batteries held it back somewhat.

GAME BOY ADVANCE SP (AGS-001)

■ Two years after the launch of the original GBA Nintendo released the SP, offering a rechargeable battery, front-lit LCD screen and compact clamshell design which made it even more portable. The only real omission was the removal of the 3.5mm headphone jack – an accessory was released to cover this.

GAME BOY ADVANCE SP (AGS-101)

■ 2005 saw a largely under-the-radar revision of the GBA SP in the form of the AGS-101. The LCD screen was backlit, offering better brightness than the original AGS-001 model. It was also possible to adjust the backlight intensity with the brightness button – on the AGS-001, this button simply switched the frontlight off.

“I played loads of Castlevania and Metroid on it”
Paul Davies

» Like *Fire Emblem*, *Advance Wars* took its western bow on Nintendo's 32-bit portable console.

on-the-go gaming, but it was original releases such as *Advance Wars*, *Mario Kart: Super Circuit*, *Golden Sun*, *Metroid Fusion* and *WarioWare Inc.* which truly illustrated what the hardware was capable of. This, combined with a more enthusiastic marketing spend, ensured that the system began to gather momentum all over the globe, and when it became apparent that challengers like the Tapwave Zodiac and Nokia N-Gage posed no immediate threat to Nintendo's market share, the console settled down into a period of complete control, attracting robust third-party support due to the fact that it was essentially the only handheld in town. "I was a really late starter in terms of when I got my first game out on the system," recalls David, who had early access to a Game Boy Advance development kit. "The project I had the prototype dev kit for didn't crystallise, so I carried on with the Game Boy Color work and some home console stuff before getting involved with *Medal Of Honor: Infiltrator* in 2003." The story behind this likeable Electronic Arts-published title typifies the changeable nature of third-party development – something which, arguably, hasn't changed right up to the present day. "That project was one of the most enjoyable things I've worked on, and not just on the GBA," says David. "Great team, great game, great results; but the company I was doing it for – Hotgen – went bust close to the scheduled end. We finished it off working out of a function room in a Croydon hotel."

Putting aside the shaky nature of third-party development, it was clear that despite ruling the entire handheld sector, Nintendo wasn't content to take its foot off the gas. In 2003, the Game Boy Advance SP was launched and to many, it proved to be the machine the original should have been from day one. While some grumbled about the overhaul appearing so quickly, faithful fans had no qualms about upgrading. "Nintendo is always about the hardware," says Paul. "After a million different versions of Game Boy, it wasn't even an issue, at least not for the ▶

GAME BOY MICRO

■ Released alongside the Nintendo DS, the Game Boy Micro is a miniaturised edition of the Game Boy Advance hardware which lacks backwards compatibility with Game Boy and Game Boy Color titles. It's the smallest Game Boy ever made, and reinstates the 3.5mm headphone socket removed on the SP model.

GAME BOY PLAYER

■ Essentially a GBA which fits under the GameCube, the Game Boy Player allows you to play GBA, Game Boy and Game Boy Color software on the big screen. A boot disc is required to use the peripheral, and not all GBA titles are compatible with the device, mind.

UNIQUE EXPERIENCES

The console had a diverse – and sometimes odd – library of games

WARIOWARE: TWISTED!

■ Motion control isn't a new thing these days as most smartphone games showcase it, but this 2004 release – which featured a gyro sensor in the cartridge – was a revelation. Mini-games based around tilting and turning the console make this a classic. It also had a rumble feature.

BOKTAI: THE SUN IS IN YOUR HAND

■ Produced by Hideo Kojima and employing a light sensor in the cart which was used to charge your vampire-slaying in-game weapon, *Boktai* has to stand as one of the most unique titles in the Game Boy Advance library. An excellent sequel arrived in 2004.

YOSHI'S UNIVERSAL GRAVITATION

■ Known as *Yoshi Topsy-Turvy* in North America, this 2D platformer made use of a tilt sensor in the cartridge, similar to *WarioWare Twisted*, to allow the player to manipulate the in-game environment, causing enemies and items to move and shift as the console is turned.

DRILL DOZER

■ One of only two Game Boy Advance titles to use a built-in rumble feature (*WarioWare: Twisted* was the other), *Drill Dozer* was developed by Pokémon studio Game Freak. A 2D action platformer with gameplay based around using a massive drill, the title was a late classic for the console.

KORO KORO PUZZLE HAPPY PANECHU!

■ This 2002 Japan-only puzzle title was the first game to use the tilt sensor, and is built around grouping coloured blocks to remove them from the play area. Produced by Masayuki Uemura – who designed the Famicom – it's a shame this unique title never made it to the west.

SPECS SHOWDOWN

THe GBA was toted as a portable SNES, let's see if it was...

GAME BOY ADVANCE

- **CPU:** 16.8 MHz 32-bit ARM7TDMI, 8-bit Z80 coprocessor for Game Boy backward compatibility
- **MEMORY:** 32 kilobyte + 96 kilobyte VRAM (internal), 256 kilobyte DRAM (external)
- **MAXIMUM RESOLUTION:** 240×160 pixels
- **COLOURS:** 512 simultaneous colours (character mode), 32,768 simultaneous colours (bitmap mode)
- **SOUND:** Dual 8-bit DAC for stereo sound

SNES

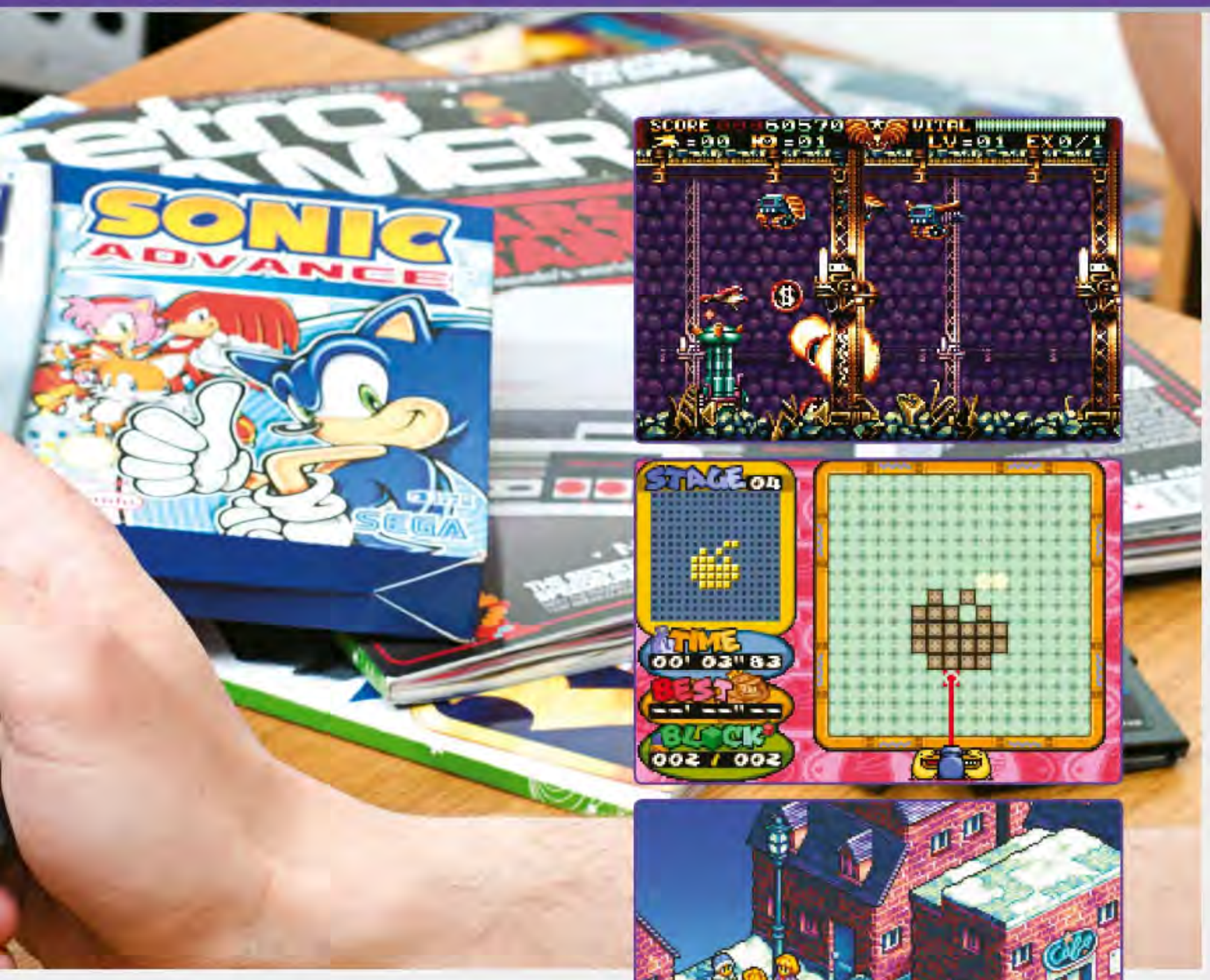
- **CPU:** Ricoh 5A22 @ 3.58 MHz
- **MEMORY:** 128KB System RAM, 64KB video RAM
- **MAXIMUM RESOLUTION:** 512×448 pixels
- **COLOURS:** 256 on-screen from a palette of 32,768
- **SOUND:** Nintendo S-SMP, 8-channel ADPCM audio

- **CPU:** 32-Bit RISC CPU MIPS R3051 at 33.8688 MHz, 32-bit Sony GPU
- **MEMORY:** 2 MB main DRAM
- **MAXIMUM RESOLUTION:** 640×480 (interlaced)
- **COLOURS:** 57,344 (256×224) to 153,600 (640×240) from a palette of 16,777,216
- **SOUND:** 16-Bit Sony SPU, 24-channel sound

PLAYSTATION

▶ hardcore fans. I guess we all saw it as Nintendo kindly attempting to improve the experience." Taking cues from the Game & Watch dual-screen range, the SP's clamshell design not only made it more portable, but also protected the screen when in transit. The display now had illumination – albeit of the rather dim front-lit variety (a superior backlit SP model would appear later) – and that all-important rechargeable battery meant having to buy a constant stock of AAs was to become a thing of the past. It's easy to overlook this feature today when practically every portable device sold has its own internal power source, which can be topped up at any available wall socket, but back in 2003 it was something of a minor revelation. The Game Boy line had truly come of age, not only allowing users to game in the dark, but also freeing them from the archaic shackles of battery-buying. However, Nintendo giveth and Nintendo taketh away, and in streamlining the hardware the Japanese giant had to make some sacrifices. The 3.5mm headphone socket – an essential feature for those long and crowded car journeys – was removed entirely, and could only be obtained via the purchase of a special adaptor that connected to the console's charging socket. This meant that it wasn't possible to charge the console and listen via headphones at the same time – a minor inconvenience, but an inconvenience all the same.

» A new *Pokémon* generation arrived on the GBA, as well as enhanced remakes of *Pokémon Red & Green*.



» RPGs flourished on the GBA – *Final Fantasy Tactics Advance* being one of several Square Enix classics.

The release of the SP coincided with a fresh batch of solid-gold classics, such as *The Legend Of Zelda: A Link To The Past, Mario & Luigi Superstar Saga, Advance Wars 2: Black Hole Rising, Final Fantasy Tactics Advance, Metroid: Zero Mission, Super Mario Advance 4: Super Mario Bros. 3, Golden Sun 2: The Lost Age, Pokémon Ruby & Sapphire, Shining Force: Resurrection Of The Dark Dragon* and many more besides. The machine was entering what was arguably its zenith, with a steady stream of software arriving on a regular basis.

GETTING CONNECTED

While the Game Boy Advance perhaps wasn't as groundbreaking as the touchscreen Nintendo DS which would succeed it in 2005, it introduced its fair share of innovations, largely via bolt-on devices which were aimed at expanding the connectivity of the device. Out of the box the GBA maintained the link cable functionality of the original Game Boy system, where consoles could be connected for multiplayer gaming using physical wires. The big difference was that the GBA supported multiple consoles using a special hub, which meant that local multiplayer titles like *The Legend Of Zelda: Four Swords* (included with *Link To The Past*) were possible, making the experience even more social. However, the need for additional hardware limited the impact of this feature. "I don't think I've ever met a real, game-playing consumer that used the Game Link cable for more than five minutes," laughs David. "Unfortunately, publishers loved that feature because Nintendo did, and it was a real pain in the arse to develop for."

While Nintendo released several variants of the link cable throughout the lifespan of the Game Boy Advance hardware, the real step forward for connectivity was the wireless adapter released alongside *Pokémon Fire Red & Leaf Green* in 2004. Ushering in the wireless revolution which started in earnest with the Nintendo DS and Sony PlayStation Portable, it supported around 30 games but sadly wasn't backwards-compatible with old-fashioned link cable software, which would have made it even more impressive. Despite its limited scope, the adapter was yet another example of Nintendo's uncanny ability to predict industry trends; these days, we take wireless local multiplayer as a given.

It wasn't just connectivity with other Game Boy Advance consoles that Nintendo was concerned with during this time; the company's desire to innovate was seemingly boundless and it made excellent use of its handheld when it came to expanding gameplay possibilities on its domestic system, the GameCube. In recent times the rise of tablets and smartphones – as well as the introduction of the Wii U – has brought 'second screen' gaming to prominence, but Nintendo flirted with the idea over a decade ago. Granted, while a lot of link-up functionality unlocked little more than bonus content, some titles – such as *The Legend Of Zelda: Four Swords Adventures, Pac-Man VS* and *Final Fantasy Crystal Chronicles* – made use of the GBA in inventive ways, turning the system into a controller for the GameCube or using the console's screen to manage inventory. "The only thing I worked on that used the GameCube hook up was *Medal Of Honor: Infiltrator*, but it wasn't a multiplayer feature," says David. "What it did was turn your Game Boy Advance into a map viewer for *Medal Of Honor: Rising Sun*." While it might have passed under the radar of many consumers back then, given the current rumours surrounding the forthcoming Nintendo NX console – which is speculated to be a fusion of portable and domestic hardware – it's fascinating to note that Nintendo and the third-

THE BEST PORTS

The home console or arcade games that shone on the GBA

SUPER GHOULS 'N GHOSTS

■ While it doesn't quite match the SNES original in terms of visual and aural spectacle, this pint-sized port is still incredibly playable and benefits from a new 'arranged' mode, additional levels which reference previous games in the series and the ability to save your progress.

FINAL FIGHT ONE

■ Capcom's classic brawler was denied a complete port on the SNES so it was nice to see Capcom rectify this oversight by releasing one on the GBA. *Final Fight One* had scaled-down visuals but everything else was in good order, including a two-player link-up mode.

STREET FIGHTER ALPHA 3 UPPER

■ Arguably the most ambitious port in the history of the Game Boy Advance, Crawfish's work on *Street Fighter Alpha 3* is remarkable. The studio was able to include all of the characters and moves from the arcade game, as well as add in three extra fighters.

THE LEGEND OF ZELDA: A LINK TO THE PAST

■ The fact that very little has changed in this port of the 1991 SNES classic is reason enough to hail it as a must-have on GBA – owning one of the best games of all time in portable form was massive news back in 2002. A multiplayer-focused offering – dubbed *Four Swords* – was also included on the cart.

METROID: ZERO MISSION

■ Okay, so this isn't a straight port in the strictest sense – it's a remake of the original *Metroid* – but *Zero Mission* is easily one of the best games on the GBA, so it deserves a mention. The original *Metroid* is remastered and enhanced to exploit the advancements seen in *Metroid Fusion*, and the end result is a true gem. Unmissable.

THE MISSING LINK

Notable GameCube games that were made better by using a GBA

ANIMAL CROSSING

■ The Game Boy Advance's screen can be used to design patterns for your furniture in the game, as well as grant access to a special secret island. There's also a virtual pet mini-game to play, and, if you are tired of Tom Nook's nonsense, you can use the Game Boy Advance to play unlockable NES games.

PAC-MAN VS.

■ One of the most unique uses of the Game Boy Advance-to-GameCube link cable, *Pac-Man Vs.* has three players assuming the roles of *Pac-Man*'s antagonistic ghosts and looking at the TV screen while the Pac-Man player uses the handheld and is able to see the entire map. A great party game, even now.

FINAL FANTASY CRYSTAL CHRONICLES

■ Another title built around the idea of multiplayer, this *Final Fantasy* spin-off title enables each player connected to a Game Boy Advance to control their in-game character on the TV and access menus on the handheld without pausing the gameplay.

THE LEGEND OF ZELDA: FOUR SWORDS ADVENTURES

■ Arguably the biggest title to harness the power of the link cable, *Four Swords* not only makes use of the Game Boy Advance in its single-player mode – allowing the handheld to be used as a controller – but also permits additional Game Boys to be hooked up for multiplayer.

METROID FUSION / METROID PRIME

■ This link-up between two *Metroid* games is a good example of how content could be unlocked using the cable. It was possible to access the hidden version of the NES *Metroid* and gain access to the Fusion Suit for use in *Metroid Prime* – plenty of incentive to make the effort.

“It was like a handheld SNES, and that was a big deal”
Paul Davies

» *Astro Boy: Omega Factor* was released in the West to coincide with a new *Astro Boy* TV series.

▶ parties who worked on its hardware were dabbling with such groundbreaking concepts 15 years ago.

STAYING RELEVANT

While its forerunner managed to last a decade the Game Boy Advance had a surprisingly short lifespan – which makes its total sales of over 80 million units even more impressive. By 2004 Nintendo was set to release a new handheld, but interestingly it didn't initially position the Nintendo DS as a successor to the GBA. Instead, it was officially referred to as a 'third pillar' and to reinforce this stance the Game Boy Advance hardware was refreshed a third time in the form of the Game Boy Micro. Cheap, compact and well designed but lacking support for monochrome and Game Boy Color cartridges, the Micro has the distinction of being the last console to feature the Game Boy branding. When the DS became a runaway hit the writing was on the wall for the Micro – especially as the DS was backwards-compatible with GBA software, making the smaller console redundant. It sold less than three million units and was quietly retired.

Even if the Micro had been a success, the issue for Nintendo was that developers were flocking to the DS and leaving the GBA in the dust. While some late releases proved that the hardware was still capable of delivering amazing experiences – *The Legend of Zelda: Minish Cap* being one example – it was obvious that the DS had picked up the slack and Nintendo's early insistence that the DS and Game Boy Advance could happily coexist began to sound alarmingly naive. Third-party studios switched focus to the newer system and Game Boy Advance titles began to dry up.

» The *Super Mario Advance* series spanned four games and updated some of the Italian plumber's finest 8-bit and 16-bit titles.

The retirement of the Game Boy name was significant at the time. For Nintendo, the brand had been its equivalent of the Sony Walkman – a 'catch-all' name which had become a byword for handheld gaming. However, the moniker had connotations that Nintendo was perhaps eager to move away from; it suggested the product was focused at children, while the DS would achieve commercial success by catering not only for children, but also adults, thanks to its *Brain Training* series. "My guess is that the branding went because Nintendo wanted the DS to appeal to a much wider audience," says David. "Given how successful the DS was, I wouldn't like to argue against that decision." Indeed, the results speak for themselves – the DS has sold over 150 million units worldwide since launch, and is the best-selling handheld of all time, and the second-best selling videogame system ever, after the PlayStation 2.

Even so, the Game Boy Advance has an important place in gaming history. It was arguably the first handheld to deliver an experience which wasn't held back by hardware limitations. "The GBA was the first handheld system that allowed you to make authentic versions of the types of games people had been playing in the arcades and on consoles up to, say, the mid-nineties," David says. "That was a major change of scope compared to Nintendo's previous handhelds. There are lots of fantastic games for Game Boy and Game Boy Color, but the ones that work best are tailored to the format – and the format was so limited that not everything was going to work," Paul agrees. "It was like a handheld SNES, and that was a big deal. It proved to be a strong platform in itself, and is fondly remembered for having substantial titles, similar in scope to the best of 16-bit era." While Nintendo has seemingly retired the Game Boy brand, David has a hunch that we've not heard the last of it. "Successful brands do tend to have an inherent value. The Game Boy name could well return at some point, or maybe they'll reinvent the Virtual Boy for a face-off against Oculus Rift?" ✱

ESSENTIAL ORIGINALS

The Game Boy Advance was home to many new titles

NINJA COP

■ One of Hudson Soft's most underrated classics, *Ninja Cop* (*Ninja Five-0* in North America) borrows elements of *Shinobi*, *Bionic Commando* and *Elevator Action* to create one of the most original and playable action titles on any handheld. Copies are now quite hard to come by.

GOLDEN SUN

■ An all-new RPG series from *Shining Force* studio Camelot Software Planning, *Golden Sun* was one of the GBA's big early exclusives and spawned two excellent sequels, one on GBA and the other on the Nintendo DS. Sporting attractive visuals and excellent music, this has stood the test of time better than most GBA releases.

WARIOWARE INC.: MEGA MICROGAME$!

■ *WarioWare Inc* was like a breath of fresh air when it launched in 2003. Made up of a series of short-burst mini-games and packed with the kind of zany humour which is practically timeless, this superb slice of GBA brilliance remains the most pure entry in the entire series.

REBELSTAR: TACTICAL COMMAND

■ *Rebelstar* is the work of strategy supremo Julian Gollop and his brother Nick, and plays like a scaled-down version of Gollop's original *X-Com* game. The deep and rewarding gameplay is augmented by some excellent anime-style graphics, and it's a crying shame this didn't receive more attention upon release.

MARIO VS. DONKEY KONG

■ While this GBA-exclusive stars two famous Nintendo characters, the unique puzzle-platforming gameplay was refreshingly new, and laid down a template which is still be utilised to this day. Guiding those adorable Mini-Mario toys to the exit is harder than it sounds.

retro GAMER READERS' CHOICE

TOP 25

GAME BOY ADVANCE GAMES

It might not have had the longest lifespan, but Nintendo's handheld had more than its fair share of incredible games. Readers voted for over 150 different games, but only 25 can be considered truly elite – Nick Thorpe starts the countdown...

25 Gunstar Future Heroes

■ DEVELOPER: **Treasure/Hitmaker**
■ GENRE: **Run-and-gun** ■ YEAR: **2005**

It feels more like a remake, but the return of *Gunstar Heroes* is packed with variety and some great throwback sections. Thanks to Treasure's programming, it's also one of the system's most impressive games.

24 Sonic Advance

■ DEVELOPER: **Dimps**
■ GENRE: **Platformer** ■ YEAR: **2001**

It was almost heretical in 2001, but Nintendo's handheld proved to be a fine home for Sega's mascot. The first game in the *Advance* trilogy is the best of the bunch, sticking to what made the Mega Drive games great.

23 Super Mario Advance 3: Yoshi's Island

■ DEVELOPER: **Nintendo**
■ GENRE: **Platformer** ■ YEAR: **2002**

The GBA was home to quite a few conversions of great SNES games, and *Yoshi's Island* is one of the very best. Very few compromises were made to bring the Super FX 2-powered original to the portable system.

22 F-Zero: Maximum Velocity

■ DEVELOPER: **Nd Cube**
■ GENRE: **Racing** ■ YEAR: **2001**

Who needs full 3D when you can have the retro delight of Mode 7-style rotating race tracks? This sequel to the SNES classic delivers a brand-new set of vehicles and tracks, but keeps the classic fun.

21 Rhythm Tengoku

■ DEVELOPER: **Nintendo SPD**
■ GENRE: **Rhythm action** ■ YEAR: **2006**

The very last first-party release for the GBA didn't make it out of Japan, but the thriving import market lapped up the addictive beat-based minigames. Sequels for the DS, Wii and 3DS followed.

6 REASONS TO REVISIT KANTO

20 Pokémon FireRed & LeafGreen

■ DEVELOPER: **Game Freak**
■ GENRE: **RPG** ■ YEAR: **2004**

The original *Pokémon* games on the Game Boy were mind-blowingly successful games, but they weren't perfect. What's more, they weren't cross-compatible with the new Game Boy Advance games, so there was no way to get your precious Squirtle off that old cartridge. Fortunately, these remakes not only ensured that players could once again catch 'em all, they improved significantly on the originals with a wide range of new features.

Pokémon boast **all-new moves and abilities** introduced in the second and third-generation games, allowing for more complex battle strategies.

First-generation Pokémon all retain their later evolutionary lines, so you can pick up the likes of **Pichu, Magby, Crobat, Kingdra and Slowking.**

You can transfer Pokémon from *FireRed & LeafGreen* to the DS and 3DS games, allowing you to **preserve over a decade of progress.**

The monochrome and often ugly sprites of the original games have been replaced with far more appealing and on-model, **full-colour designs.**

You can now **breed your Pokémon**, providing the opportunity to pass down moves and stats in an attempt to get the best possible combination.

There's a much **more involved post-game** than in the originals – you can visit the Sevii Islands, catch legendary Pokémon and even fight the Elite Four again.

PERFECTION IN YOUR POCKET

19 Super Mario Advance 2: Super Mario World

■ DEVELOPER: **Nintendo EAD**
■ GENRE: **Platformer** ■ YEAR: **2001**

When we asked our readers to name the very best games ever for issue 150 of **Retro Gamer**, *Super Mario World* was the one that topped the epic list due to its superlative level design, structure and sense of adventure. Since Nintendo saw fit to give it a portable outing on the Game Boy Advance, it stands to reason you'd be seeing it in this list too – it wasn't new, but it was a near-perfect game very closely replicated for handheld players.

Of course, there's a bit more to this release than being just a straight conversion of the SNES original. The colours have been lightened a bit to help owners of early Game Boy Advance models, there's a brand-new intro sequence, and there are now Dragon Coins in levels that didn't originally have them.

NEW TWISTS ON OLD WARES

18 Wario Ware Twisted

■ DEVELOPER: Intelligent Systems
■ GENRE: Minigame collection ■ YEAR: 2004

■ ***Wario Ware Twisted*** **included both a gyro sensor and a rumble feature, allowing for motion-controlled games with a force-feedback feature.**

■ Unlike the first game, *Wario Ware Twisted* features games which require you to turn your system around – sometimes through a full-360 degrees.

■ **Despite the fact that the cartridge houses the gyro sensor, the game works identically on all compatible hardware (although we don't recommend using the Game Boy Player).**

■ *Wario Ware Twisted* wasn't released in Europe due to the presence of mercury within the gyro sensor – a banned substance in electronics within the European Union.

WAR NEVER CHANGES (MUCH)

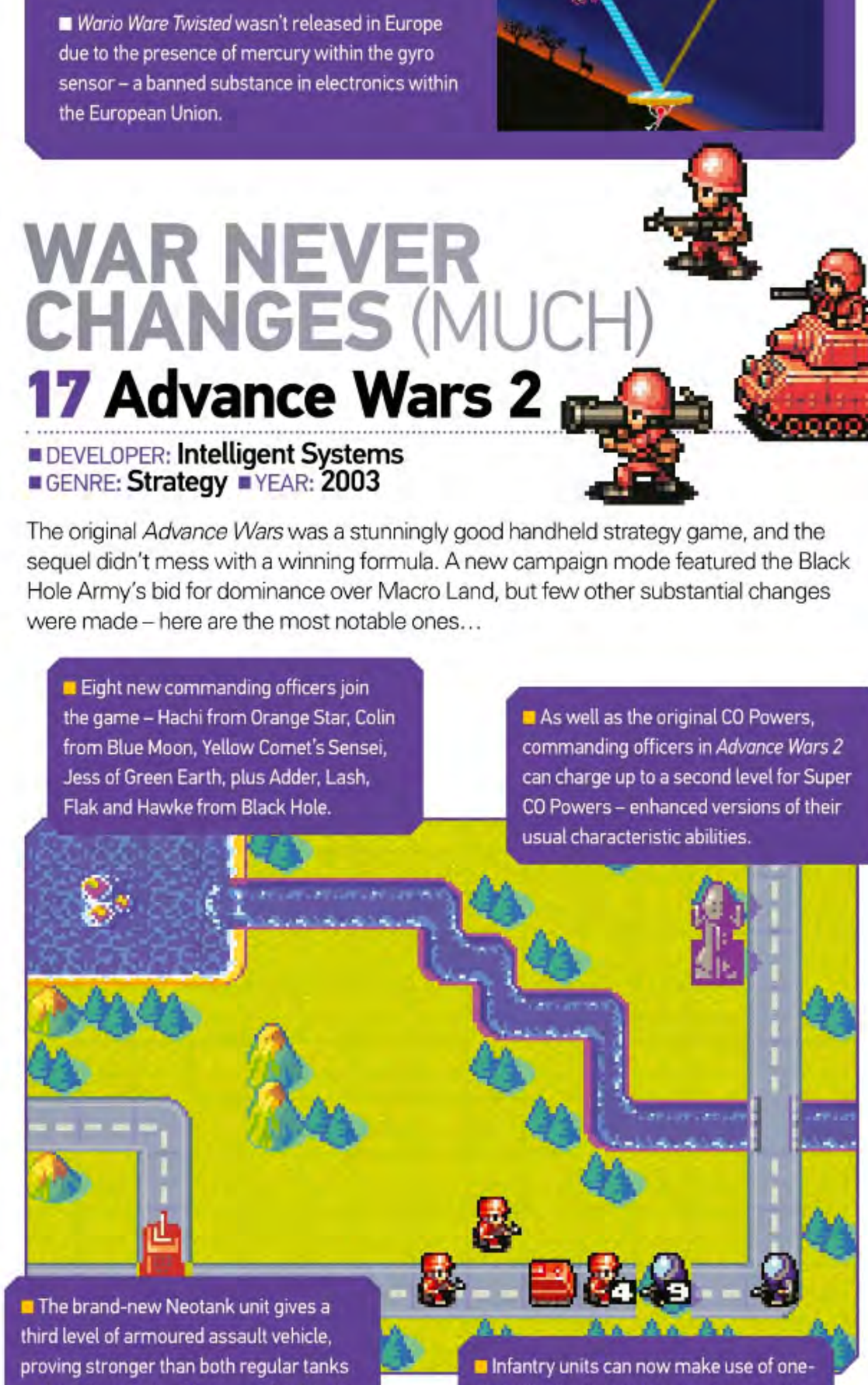
17 Advance Wars 2

■ DEVELOPER: Intelligent Systems
■ GENRE: Strategy ■ YEAR: 2003

The original *Advance Wars* was a stunningly good handheld strategy game, and the sequel didn't mess with a winning formula. A new campaign mode featured the Black Hole Army's bid for dominance over Macro Land, but few other substantial changes were made – here are the most notable ones...

■ Eight new commanding officers join the game – Hachi from Orange Star, Colin from Blue Moon, Yellow Comet's Sensei, Jess of Green Earth, plus Adder, Lash, Flak and Hawke from Black Hole.

■ As well as the original CO Powers, commanding officers in *Advance Wars 2* can charge up to a second level for Super CO Powers – enhanced versions of their usual characteristic abilities.



■ The brand-new Neotank unit gives a third level of armoured assault vehicle, proving stronger than both regular tanks and medium tanks. Of course, they're also more expensive.

■ Infantry units can now make use of one-shot missile silo emplacements, spreading damage across a wide area without having to get up close and personal with the enemy's forces.

SUPER RPG BROS.

16 Mario & Luigi: Superstar Saga

■ DEVELOPER: AlphaDream ■ GENRE: RPG ■ YEAR: 2003

Having already had *Super Mario RPG* and *Paper Mario*, Nintendo's portly plumber wasn't satisfied with his level of role-playing stardom and roped his brother in for another new spin on the genre. Vibrant sprite work, genuinely amusing dialogue and simultaneous control of the brothers make this a treat.

RIGHTING THE WRONGS OF THE PAST

15 Final Fight One

■ DEVELOPER: Capcom ■ GENRE: Beat-'em-up ■ YEAR: 2001

In the late Eighties, you couldn't find a better arcade beat-'em-up than Capcom's *Final Fight*, so it's easy to understand why SNES owners would have been excited to get their hands on a conversion. Unfortunately for them, it wasn't all it could be – not only was it missing an entire level, one third of the protagonists, Guy, had done a runner and you couldn't even play a multiplayer game with the remaining characters Cody and Haggar. It wasn't a bad beat-'em-up, but it wasn't the experience that fans had hoped for.

Thankfully, Capcom was able to rectify all those mistakes on the GBA. The SNES visuals have been pulled across, but this time the game has the Industrial Area, you can play as all three characters, there are more enemies on screen and with a link cable you can even play co-op games. There are even some new additions for fans – each boss is now preceded by a dialogue scene, and the *Street Fighter Alpha 3* versions of Cody and Guy can be unlocked as alternate characters. It might just be the definitive version of the game.

RUMBLE WITH THE BOSSES

14 Drill Dozer

■ DEVELOPER: **Game Freak** ■ GENRE: **Platformer** ■ YEAR: **2005**

There's more to Game Freak than *Pokémon*, although you wouldn't know it from the company's Noughties output – *Drill Dozer* is the only original IP the company developed during that entire decade. Luckily, it's an excellent platformer with a cool central mechanic. You take control of Jill, a member of the Red Dozers bandit gang and pilot of the powerful Drill Dozer. This vehicle can drill through walls, enemies, barriers and more, with more durable objects requiring you to shift to higher gears. The cartridge includes a built-in rumble feature, allowing you to really feel the carnage you're causing.

CROOG

This is your big bad guy, and in your early encounters he'll use this neat scorpion robot to attack you. You have to counter its drill with your own to damage it. After taking sufficient punishment, the boss will transform – and that's only the start of your troubles with Croog.

Haunted Statue

This malevolent masonry is possessed by an evil spirit, and is quite happy to splat you with its spiked mace! However, those spikes can retract if they make a big impact on the ground – when they do, you'll get an opportunity to drill into the mace and damage your enemy.

CARRIE

Carrie's a detective, and thus on the side of the forces of good. Of course, you're a bandit, so you're not exactly on the law-abiding side, which will bring you into conflict often. In this form, drill into the cable that connects the two halves of her police-bot to win.

Tank Dozer

Skullkers aren't particularly formidable enemies, so some of them will try to improve their odds by manning tanks. These are easy to take out – just drill into the front hole and accelerate to third gear. However, they have the ability to strike in tandem, so watch out...

13 Pokémon Ruby, Sapphire & Emerald

■ DEVELOPER: **Game Freak**
■ GENRE: **RPG** ■ YEAR: **2003**

Unsurprisingly, the only brand-new *Pokémon* adventures for the Game Boy Advance were its bestselling games. Two-on-two battles were introduced for the first time, and 135 new creatures were available to catch – however, it was also the first set of games in the series in which you could no longer catch 'em all.

12 Castlevania

■ DEVELOPER: **Konami Computer Entertainment Kobe**
■ GENRE: **Action-adventure** ■ YEAR: **2001**

It might not be Koji Igarashi's favourite *Castlevania*, but the first of the series' three Game Boy Advance versions is a hit with fans. Despite dark visuals unsuited for the original machine's non-lit screen, the game impressed with a structure that was reminiscent of the PlayStation classic *Symphony Of The Night*.

11 Final Fantasy Tactics Advance

■ DEVELOPER: **Square Enix**
■ GENRE: **RPG** ■ YEAR: **2003**

This follow-up to the excellent PlayStation spin-off *Final Fantasy Tactics* is a masterful isometric strategy RPG, and since its plot is standalone you can jump right in. The most striking feature of this game is the Laws system, in which in-game judges forbid certain actions and reward others.

10 Golden Sun

■ DEVELOPER: Camelot Software Planning
■ GENRE: RPG ■ YEAR: 2001

There's no shortage of traditional Japanese RPGs on the Game Boy Advance, but this original effort even beats out beloved classics like *Final Fantasy VI* in your voting. The protagonist Isaac and his companions are out to stop alchemy from returning to the world of Weyard, in an attempt to prevent worldwide conflict. The most striking feature of the game is the ability to assign Djinn creatures to characters, altering their stats and classes as well as granting the ability to perform summon spells.

9 Fire Emblem

■ DEVELOPER: Intelligent Systems
■ GENRE: Strategy ■ YEAR: 2003

After 13 years and six untranslated games, the *Fire Emblem* finally made its Western debut on the Game Boy Advance, and it was more than worth the wait. Excellent tactical battles and the ability to permanently lose your characters are the defining features of this game, which offers a substantial single-player campaign. Unfortunately for those of you that wish to pick up *Fire Emblem* now, scarcity has driven the second hand value far above its original retail price.

8 Astro Boy: Omega Factor

■ DEVELOPER: Treasure/Hitmaker
■ GENRE: Beat-'em-up ■ YEAR: 2003

Osamu Tezuka's famous creation gets an awesome beat-'em-up, courtesy of Sega's Hitmaker studio and technical wizards Treasure. What sets the *Omega Factor* apart from the rest is the non-linear structure that sees you jumping through time in an attempt to avert disaster, uncovering new and unseen parts of old levels in the process.

A NEW STYLE FOR ANCIENT EVIL

7 Castlevania: Aria Of Sorrow

■ DEVELOPER: Konami ■ GENRE: Action-adventure ■ YEAR: 2003

Castlevania is a series that takes place in the past. That's a fundamental truth of the franchise, and yet *Aria Of Sorrow* discards it with confidence to achieve a setting where Dracula has been revived in 2035. However, beyond the modern clothing of protagonist Soma Cruz, this is the kind of exploration-focused *Castlevania* that people have known and loved since Koji Igarashi's initial work on *Castlevania: Symphony Of The Night*. The big new feature here is the Tactical Soul system, which allows players to swap between abilities gained from defeating various enemies.

SWEET SOUL BROTHER

Learn how the Tactical Soul system works

Guardian Souls

These blue-coloured souls allow you to summon familiars and even transform into various nasty beasts. These souls include Devil Form, in which you become a devil and charge into enemies, Bat Form, which grants you the ability to fly about the castle, and Guardian Shadow Knight, which gives you an ally in battle.

Bullet Souls

These red-coloured souls grant Soma the ability to use additional weapons, like the old sub-weapon system of *Castlevania* past. These include Eagle Shot, the ability to hurl eagles, Stone Beam, which is gained from the cockatrice and petrifies enemies, and Last Scream, in which you literally murder enemies with your voice.

Enchanted Souls

Yellow souls grant some kind of special property without the use of MP, but only one can be equipped at any time. These include Search Eye, which identifies the breakable walls so often found in *Castlevania* games, VIP, which lowers the price of goods in shops, and Deep Seeker, which allows you to walk underwater.

Ability Souls

Silver-coloured souls normally come via bosses, and unlike the other kinds of souls they're always active and don't consume any MP. These include things like the Back Dash, allowing you to quickly escape danger, Double Jump, which is something of a Ronseal ability, and Comet Kick, an extra attacking move.

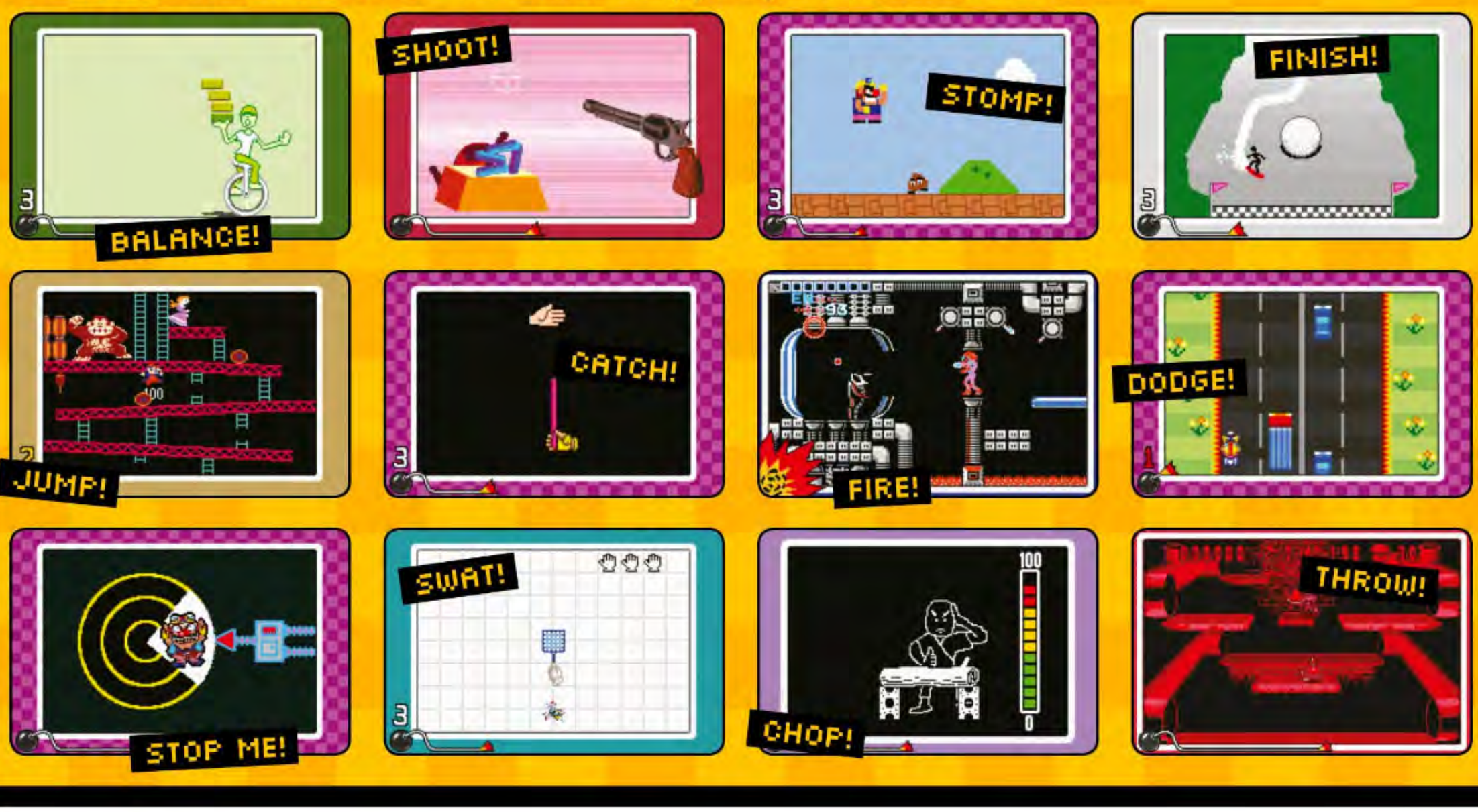
MICRO GAMES, **MEGA FUN**

6 Wario Ware Inc.: Minigame Mania

■ DEVELOPER: **Nintendo R&D1** ■ GENRE: **Minigame Collection** ■ YEAR: **2003**

Many of the best Game Boy Advance games are sequels and remakes, so a brand-new and innovative game is even more highly prized than usual – and *Wario Ware Inc.* is just such a game. The premise is simple: a rapid-fire procession of minigames, each with a singular goal and lasting no more than a few seconds at a time. The key to the game's appeal is variety – you never know what's coming next, and you'll be pushed hard as the speed increases and your reflexes struggle to keep up. Deservedly, this game was followed up by several sequels.

WARIO WAREHOUSE A selection of the tiny games you'll take on in Wario Ware Inc....



5 Metroid: Zero Mission

■ DEVELOPER: **Nintendo R&D1**
■ GENRE: **Action-adventure** ■ YEAR: **2004**

When discussing how to follow up on *Metroid Fusion*, one of the developers suggested a conversion of *Super Metroid*, but Yoshio Sakamoto had other ideas. As a veteran of the series, Sakamoto decided to return to the roots of the series with a full remake of the original *Metroid*.

The presence of both *Metroid Fusion* and *Metroid: Zero Mission* on the GBA was beneficial. Both games offered different takes on the same template with *Zero Mission* favouring a more traditional *Metroid* experience.

HOW **MINISH CAP** ENHANCED ZELDA

4 The Legend Of Zelda: The Minish Cap

■ DEVELOPER: **Capcom** ■ GENRE: **Action-RPG** ■ YEAR: **2004**

■ Unlike the vast majority of *Zelda* games, this one wasn't developed by Nintendo – instead, it was outsourced to Capcom.

■ **Rather than manipulating time or the wind, Link is able to shrink in size in order to interact with the bug-sized Minish race.**

■ For the first time in a handheld *Zelda*, Link can learn new sword techniques as he progresses throughout the game.

■ **The brand-new Kinstones are pickups that, when fused, can yield rewards such as Rupees, sidequests and more.**

■ Many new gameplay elements have been added from the 3D games, including rolling when running and the icon-based HUD.

RETRO RACING **RIOT**

3 Mario Kart Super Circuit

■ DEVELOPER: **Intelligent Systems** ■ GENRE: **Racing** ■ YEAR: **2001**

When *Super Mario Kart* first graced our consoles in 1992, no home console was capable of anything like the rotating racetracks it displayed. Less than a decade later, the flagship technique best known as Mode 7 was positively retro, swept aside by the full-3D visuals of the 32-bit and 64-bit consoles. With a bit of programming wizardry, the GBA was capable of polygonal magic too – yet *Mario Kart Super Circuit* stuck resolutely to the flat racetracks of its SNES forebear.

That appeal to retro sensibilities was key to the appeal of *Mario Kart Super Circuit*. The original game is one of the most beloved racers of all time, and there was far more value in tapping into that than making a cut-back 3D racer.

Mario Kart Super Circuit doesn't include any new items, and the character roster is carried over from *Mario Kart 64*. What it does have is 20 new racetracks to conquer, each of which is designed to the standards of the original game. Once you're done with those, you can revisit the 20 tracks from *Super Mario Kart* as well.

Mario Kart Super Circuit didn't need to reinvent the wheel, and doesn't. It just provides a whole bunch of new content for a formula that worked very well to begin with, and does so in a package you can fit in your jeans. The Game Boy Advance has a superb reputation for games that play to and build upon your nostalgia, and *Mario Kart Super Circuit* is one of the reasons why.

WAR HAS NEVER BEEN **SO CUTE**

2 Advance Wars

■ DEVELOPER: **Intelligent Systems** ■ GENRE: **Strategy** ■ YEAR: **2001**

Up until the launch of the Game Boy Advance, a lot of Intelligent Systems' excellent work in the turn-based strategy genre was unfamiliar to most players outside of Japan – there were six *Wars* games prior to *Advance Wars*. Still, the developer quickly made up for lost time. *Advance Wars*' dinky-looking tanks and cutesy soldiers provided a universal appeal, with accessible yet deep strategic gameplay to back it up. With a lengthy single-player campaign, excellent multiplayer component and a range of commanding officers, each with their own unique powers to utilise, *Advance Wars* will keep your inner strategic general satisfied for ages. You can read about the COs and their powers below.

Nell
Lucky Star – All units gain a luck boost, potentially increasing damage.

Sonja
Enhanced Vision – Increases vision by one unit, player can see into forests.

Max
Max Power – Direct fire units get 25 per cent bonus and one extra movement unit.

Andy
Hyper Repair – Increases all units' HP by 2 .

Drake
Tsunami – Deals 1 damage to all enemy units (except those at 1HP).

Olaf
Blizzard – Instant snow storm, lowering enemy movement range dramatically.

Sturm
Meteor Strike – A strike deals 4HP damage to all targets within a three-unit radius.

Kanbei
Morale Boost – Infantry receive a 20 per cent offensive and defensive bonus.

Sami
Double Time – Units have no movement penalties and receive stat boosts.

Eagle
Lightning Strike – Units gain an extra turn, but with stat penalties.

Grit
Snipe – Indirect fire units gain 65 per cent offensive boost and two movement units.

FUSING OLD AND NEW

1 Metroid Fusion

■ DEVELOPER: Nintendo R&D1 ■ GENRE: Action-adventure ■ YEAR: 2002

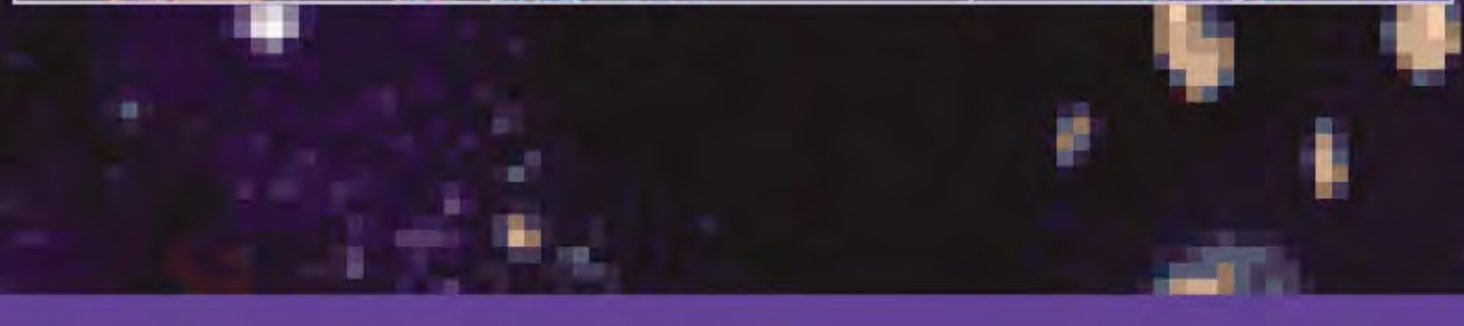
The Game Boy Advance was one of the very first platforms to recognise and cater to nostalgic gamers in a big way, and this list is all the evidence you need to support that. Conversions and remakes of Eighties and Nineties games make up a fifth of the list, and that's a trend that continues right through the voting – for example, games that narrowly missed the cut include the likes of *Doom* and *The Legend Of Zelda: A Link To The Past*. But the true appeal of the Game Boy Advance wasn't that it housed a fine retro library in your pocket – it was the fact that it offered a home to classic 2D game designs that had become lost in the home console world.

That's why *Metroid Fusion* is so brilliant. After Samus Aran's eight-year absence as a star character, Nintendo could have provided us with a simple conversion of *Super Metroid* and most people would have been happy. Instead, the developer went one better and delivered a true successor, a brand-new adventure created with the design sensibilities of the SNES classic.

Like its predecessors, *Metroid Fusion* is an exploratory platformer that places Samus alone in a hostile environment. The Biologic Space Laboratories research station has been overrun by the deadly X parasite, and Samus has to investigate what's happening and ultimately stop it. Of course, since she's lost all of her powers due to her own X infection, Samus must reacquire powers like the missiles and iconic Morph Ball in order to progress through the station.

Metroid Fusion doesn't allow for quite the same level of freedom and sequence-breaking as its predecessors, but the trade-off is a stronger narrative and a much more impressive atmosphere. In a large part, this can be credited to the SA-X, a ruthless and intelligent foe that stalks Samus throughout the game. While all of the encounters with it are scripted events, playing through for the first time and not knowing when you're going to be ambushed by a foe that can outgun you makes for some very real tension.

There's no area that *Metroid Fusion* doesn't excel in. It looks lovely, with vibrant colours and detailed sprites. It sounds great, with ominous music accompanying your every step. It plays superbly, with tight controls and excellent stage design. It wasn't necessarily the game we expected to top this list, but there's no denying that it deserves to.



ICONIC VILLAIN: SA-X

We extrapolate why Metroid Fusion's antagonist is so iconic

STAGE 1

■ The SA-X was formed from parts of Samus Aran's old Power Suit, which had been surgically removed and sent to quarantine after both she and the suit had been infected with the X parasite.

STAGE 2

■ The X parasites can obtain the physical appearance, intelligence and memories of their hosts, and even mimic technology. Thus, the SA-X is essentially a clone of a fully-powered Samus Aran, with all of her characteristic abilities and weaponry.

STAGE 3

■ Metroids are the natural predators of X parasites. Samus was cured with a treatment made from Metroid cells, and she's taken on some of its biological traits – most notably, weakness to the cold. The SA-X can detect this and will fight you with the Ice Beam.

STAGE 4

■ During your initial encounters with the SA-X, you'll be no match for it – you'll either have to hide in an inaccessible area or simply run like hell, dodging and weaving through the environment as it unleashes the full force of Samus' arsenal.

STAGE 5

■ While the SA-X attacks in the same places during every game, there's often basically no warning that it's coming, so you feel truly hunted by this creature. As soon as you spot it, it's time to take action or you are dead meat.

STAGE 6

■ X parasites can reproduce asexually, and that means that SA-X isn't necessarily a singular foe. There could be two, 20, 200 or even more – and if a single one escapes the research station, it'll kick off an enormous galactic plague. Good luck!

NINTENDO
GAMECUBE

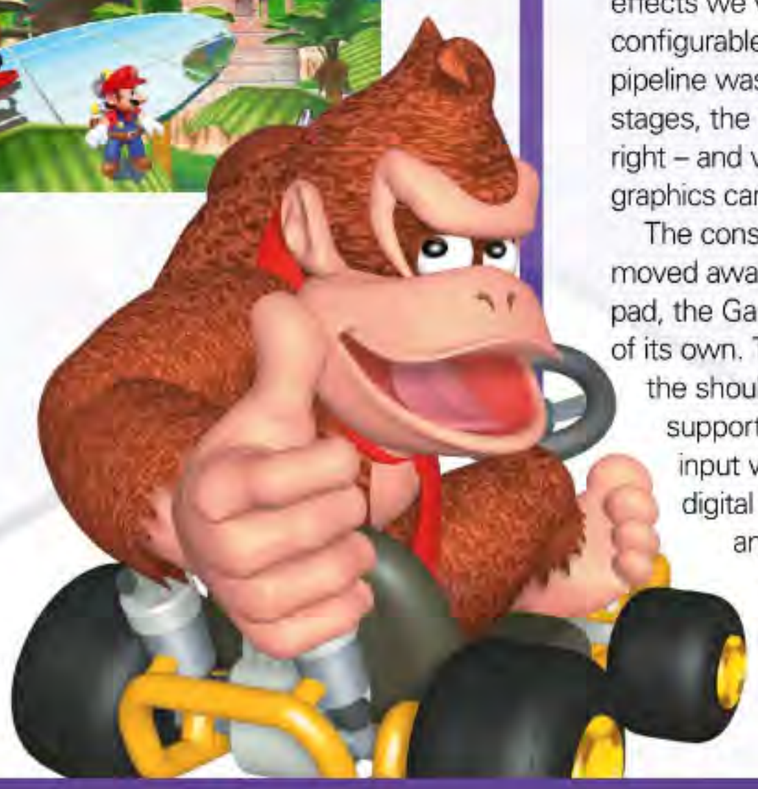
NINTENDO GAMECUBE

Damien McFerran takes a fond look back at the system which faced a huge struggle against the PlayStation 2 and Xbox but established the foundations for Nintendo's juggernaut, the Wii

Nintendo's standing in the videogame industry had taken something of a knock when the company began work on the GameCube, especially when compared to its glory days during the late Eighties and early Nineties. Following the runaway success of both the NES and SNES, the Nintendo 64 had been bullied into second place by the arrival of the PlayStation, a system which picked up where the SNES left off in the eyes of many players. The Nintendo 64 went on to sell 33 million units compared to the PlayStation's 102 million, forcing Nintendo to lick its wounds and ponder just what had gone so badly wrong.

Nintendo's insistence on sticking with cartridges had undoubtedly contributed to the N64's poor performance, and it was decided that the next console would use optical discs – a first for the company. Nintendo was also keen to ensure that its new system would offer decent power at a reasonable price, thereby attracting third-party support without driving away customers with a lofty price tag. To this end, Nintendo partnered with graphics hardware design company ArtX – led by Dr. Wei Yen, who was previously Silicon Graphics' head of Nintendo Operations and had worked on the N64 – and began development on 'Flipper', the graphics processor which would power Project Dolphin, the early codename for the GameCube. The CPU was the other piece of the puzzle, and Nintendo would team up with IBM for the GameCube's brain, codenamed 'Gekko'.

"Coming from working on the N64, when we first saw the GameCube we were impressed by the step up in power," says Phil Tossell, who worked at Rare – a studio which had a storied partnership with Nintendo – during this period. "The N64 was a limited machine, particularly with respect to the size and amount of textures you were able to use. At the same time we were wary of the shift from cartridge to disc. At the time we were working on *Dinosaur* ▶



▶ *Planet* – which would transition to the GameCube and become *Star Fox Adventures* – and that utilised a streaming world, so we knew that getting that to work with a disc setup was going to be a real challenge."

The GameCube arrived on store shelves towards the end of 2001 and was accompanied by three games in Japan and 12 in North America – none of which had Mario in them, although his sibling took the spotlight in the enjoyable *Luigi's Mansion*. This ghost-busting adventure may have been the title that true-blood Nintendo fans flocked to at launch, but it was Factor 5's excellent *Star Wars Rogue Squadron II: Rogue Leader* which truly sold the machine to the masses. It offered the most convincing replication of George Lucas' epic series yet seen in videogame form, allowing players to step into their very own X-wing and play out all of their childhood fantasies. The fact that a third-party studio was able to produce something so polished at launch was a testament to accessibility of the system. "On the whole, the GameCube was very enjoyable to develop for," says Phil. "The range of effects we were able to achieve due to the multi-stage configurable graphics pipeline was remarkable. This pipeline was like an N64 on steroids – N64 had two stages, the GameCube had 16, if memory serves me right – and was a precursor to the fully-programmable graphics cards that were appearing on PCs."

The console's controller was also unique. While it moved away from the three-pronged approach of N64 pad, the GameCube controller still offered innovations of its own. The large A button was easy to reach, while the shoulder buttons offered analogue and digital support; a slight push triggered the analogue input while depressing them fully activated the digital command. Nintendo also added a second analogue stick, the C-Stick, which would be primarily used for camera control. "Almost everybody at Rare loved the controller," Phil says. "It still rates as one of best controllers of all time for me."

» *Resident Evil 4* was intended to be a GameCube-exclusive title, however it made an appearance on the PS2.

Nintendo was keen to leave no stone unturned when it came to designing the GameCube, but there were some limitations. "The downsides were that it was severely constrained on memory," Phil says. "It only had 24MB of main memory with 16MB of so-called audio memory. Although the GameCube supported texture compression it wasn't appropriate for all textures. Fortunately, Rare's artists were already very adept at making using of smaller textures to great effect as the N64 permitted only tiny textures by comparison. The other downside was the disc. It was pretty slow, in particular with the seek time, so it was necessary to spin it up in plenty of time for when the data would actually need to be delivered. This was particularly tricky for *Star Fox Adventures* where we had taken advantage of the near-instantaneous access and transfer speed of cartridge ROM. It became a favourite pastime of testers to try and find ways to bypass or defeat the triggers set up to begin loading of the next section of a level to see if they could get it to visibly pop in or not appear at all!"

Having cut its teeth in the world of 3D with the N64, Nintendo was able to embrace the third dimension more freely thanks to the powerful

EVOLVING GAMES

The Nintendo franchises that benefitted from the Cube's extra power

THE LEGEND OF ZELDA

■ The GameCube was home to not one but two full-3D *Zelda* titles, with *Wind Waker* proving to be the most divisive of the pair upon its initial announcement. The gorgeous cel-shaded cartoon visuals and massive, water-based overworld didn't find favour with hardcore fans, but ironically the game is perhaps better regarded today than *Twilight Princess*, its successor. Both have been ported to the Wii U as HD updates since.

SUPER MARIO

■ *Super Mario Sunshine* wasn't the sequel to *Super Mario 64* that many had hoped for, but it harnessed the power of the GameCube to present a unique twist on the concept of Mario in three dimensions. Using his F.L.U.D.D. (Flash Liquidizer Ultra Dousing Device), Mario has to clean up the gorgeous Isle Delfino, which looks joyfully colourful, thanks to the sheer clout of Nintendo's sixth-generation powerhouse.

METROID

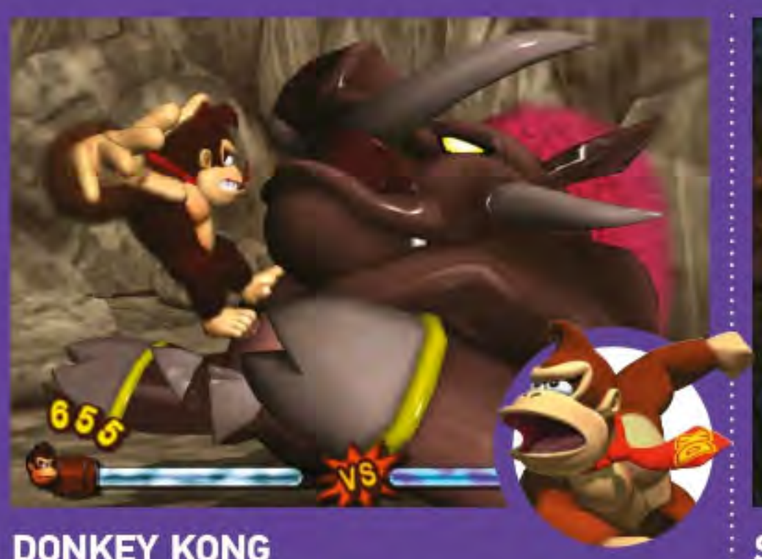
■ Coded by Retro Studios, *Metroid Prime* took the 2D template laid down by *Metroid* and *Super Metroid* but brought it into the third dimension, adopting a first-person view and placing focus on the scanning ability of Samus Aran's power suit. While the move away from 2D might have been brave, *Prime* was able to include the hallmarks of the series, such as inventive boss battles, the morph ball and the opportunity to explore your surroundings for secrets.

» *Wind Waker* introduced us to a new Link, a more cartoon-like, cel-shaded iteration of the hero. Initially, fans weren't impressed with the new look.

GameCube hardware, and some of the company's most accomplished games can be found on Nintendo's system. *Super Mario Sunshine* built on the fine work seen in *Super Mario 64* while expanding the iconic plumber's repertoire by gifting him with the 'F.L.U.D.D.' water shooter, while *The Legend Of Zelda: Wind Waker* gave us cel-shaded Link and a seemingly endless ocean world to explore. Elsewhere, *Pikmin* kickstarted an entirely new IP for the company and was to be Nintendo's take on the Real-Time Strategy genre. *Animal Crossing* was equally influential, delivering a 'life simulation' which was bursting with charm. Elsewhere, existing franchises such as *Mario Kart*, *Smash Bros.* and *Metroid* all benefitted from timely updates. *Metroid Prime* in particular was a significant release, taking the series into the realm of 3D and paving the way for a trilogy that scored highly in critical and commercial terms alike. ▶

"The range of effects we were able to achieve due to the multi-stage configurable graphics pipeline was remarkable"

Phil Tossell



DONKEY KONG

■ While many of Nintendo's franchises were taken to new levels on the GameCube, *Donkey Kong* received the most surprising upgrade. Instead of offering a platformer in the vein of *Donkey Kong Country* or *Donkey Kong 64*, *Donkey Kong Jungle Beat* mixed platforming with music. It was compatible with the DK Bongos, which had launched alongside *Donkey Konga* in 2003. Progress was achieved by tapping the drums and clapping in time with the music.

STAR FOX

■ Fox McCloud appeared twice (not counting *Smash Bros.*) on the CameCube. *Star Fox Adventures* – the final game to be developed by Rare before it was purchased by Microsoft – boasted some amazing visuals despite not being a traditional *Star Fox* outing. It remains one of the most technically impressive GameCube games, while *Star Fox Assault* returned to a traditional *Star Fox* formula, with space battles and four-player split-screen local multiplayer.

MARIO KART

■ Many gamers were disappointed that *Mario Kart 64* used 2D sprites, but Nintendo really pulled out all the stops when it came to making its GameCube sequel shine. The karts in *Mario Kart: Double Dash!!* – presented in full 3D this time – held two drivers at the same time, offering a co-op mode where one player drives and the player handles the weaponry and is able to perform a shove attack. A fun sequel with rubber banding being the only real bugbear.

NINTENDO GAMECUBE

INSIDE THE CUBE

We take a peek under the hood of the plucky little console

24 MB MOSYS 1T-SRAM 'SPLASH' SYSTEM RAM

■ The is the main system memory.

DISC DRIVE

■ This drive reads those miniature discs that GameCube games come on.

POWER SWITCH PCB

■ This board controls the turning the power on and off. Not exciting, but pretty damn important.

HEAT SINK

■ This slab of metal helps keep the GameCube's CPU at a manageable temperature.

COOLING FAN

■ Along with the heatsink, this useful fan helps to keep the console at a cool temperature.

CONTROLLER BOARD

■ This circuit board connects to the main board via a ribbon (multi-wire) cable.

IBM GEKKO POWERPC CPU

■ The brains of the GameCube system, created by IBM and clocked at 485 MHz.

ATI FLIPPER (GPU)

■ This chip handles all of the visuals, and even does some of the sound too.

Second-party studios, like Rare, were also put to work on the GameCube, but the company didn't get the special treatment many assume it did. "I think people labour under the misconception that Rare had a lot of privileged access, but in reality we didn't," reveals Phil. "By and large it mostly translated into getting things like dev kits and SDK access before anybody else, but as far as making use of the hardware in the best way, we had to do that ourselves. Nintendo's documentation up until the GameCube was pretty terrible, and I think actually that one of the unmentioned things about the GameCube was that for the first time the documentation was actually really good. This made it easier to fully make use of all the available features of the hardware."

Rare's output on the GameCube may have been curtailed by the fact that it was sold to Microsoft in 2002, but the firm still managed to dazzle with its final release. "We ported the *Dinosaur Planet* engine onto the GameCube," explains Tossell. "We really rapidly ported it over and started integrating as many new graphical features as we could in a really short space of time. We had this little demo scene with a SharpClaw character setup with really nice lighting, texturing and projected shadows. When we showed Nintendo they were so impressed that they started asking why their graphics didn't look as good! *Star Fox Adventures* is still regarded as looking great, even now. Effects like fur, grass, and reflective and refractive water still hold up. I had the opportunity to travel to Kyoto to meet Miyamoto-san and Imamura-san. I'm not really a person that gets starstruck but it was an experience that will stick with me; sitting in design meetings discussing with these guys about what we should do with *Star Fox Adventures* is not something I'll forget."

"One of the unmentioned things about the GameCube was that for the first time the documentation was actually really good"

Phil Tossell

» *F-Zero GX* was a blisteringly-fast racing game that offered arcade-quality experiences on Nintendo's humble console.

Not every studio got that kind of treatment, of course, but Nintendo made an effort to make third parties feel more at home on the GameCube than they did on the N64. Initially, third-party support for the GameCube was robust, with many companies porting over their PlayStation 2 releases to Nintendo's machine thanks to the parity in power. Sega was an early supporter, with titles like *Crazy Taxi*, *Super Monkey Ball* and *Sonic Adventure 2* all finding a receptive audience on the GameCube – ironic when you consider that the two companies had been bitter rivals during previous few console generations. Capcom was another firm which bet big on the GameCube, announcing a series of exclusives such as *Viewtiful Joe*, *P.N.03*, *Resident Evil 4* and *Killer 7*. Making the fourth mainline *Resident Evil* title a GameCube exclusive was a massive vote of confidence from the developer, and for a time it seemed like Nintendo had overcome the issue of third-party support which had blighted the N64.

However, while Nintendo's own games sold well on the console, external publishers found less success. As it became apparent that the PlayStation 2 was to be the dominant system of the generation, support began to melt away. To make matters worse, Microsoft's Xbox – also launched in 2001 – had effectively stepped into second place by offering more raw power and functionality, pushing the GameCube even further down the pecking order. The only saving grace for Nintendo was that it remained second in its native Japan, where the Xbox had little impact.

The biggest blow would be Capcom's decision to backtrack on its promise to offer exclusive support to Nintendo's machine. *Viewtiful Joe* would gain rave reviews but only sold around 275,000 units, leading Capcom to port it to the PlayStation 2 in order to bolster profitability. The same would happen with *Resident Evil 4*, with Capcom bowing to fan pressure and confirming two months before it arrived on

» Mario was missing in the GameCube launch lineup, his brother took centre stage with *Luigi's Mansion* instead.

NINTENDO GAMECUBE

ESSENTIAL PERIPHERALS

GAME BOY PLAYER

■ One of the most appealing GameCube peripherals available for the system, the Game Boy Player bolted onto the bottom of the console and allow players to run their Game Boy Advance games on the machine.

HORI GAME BOY PLAYER CONTROLLER

■ Designed for use with the Game Boy Player and lacking many of the features of the standard pad, this retro peripheral works with many standard games, such as *Sonic Mega Collection*.

DK BONGOS

■ Compatible with the likes of *Donkey Konga*, *Donkey Konga 2*, *Donkey Konga 3* and *Donkey Kong Jungle Beat*, the DK Bongos controller has to rate as one of the most unusual, yet surprisingly functional, peripherals in the history of gaming.

MEMORY CARD

■ Unlike modern hard drive-based systems the GameCube required a memory card to save data. *Animal Crossing* and *Pokémon Colosseum* – two titles which have large save files – shipped with a dedicated memory card in the game box.

MICROPHONE

■ Compatible with *Mario Party 6*, *Mario Party 7*, *Karaoke Revolution Party*, *Odama* and *Densetsu No Quiz Ou Ketteisen*, the GameCube microphone allowed players to interact with games using their voice to issue commands.

WAVEBIRD

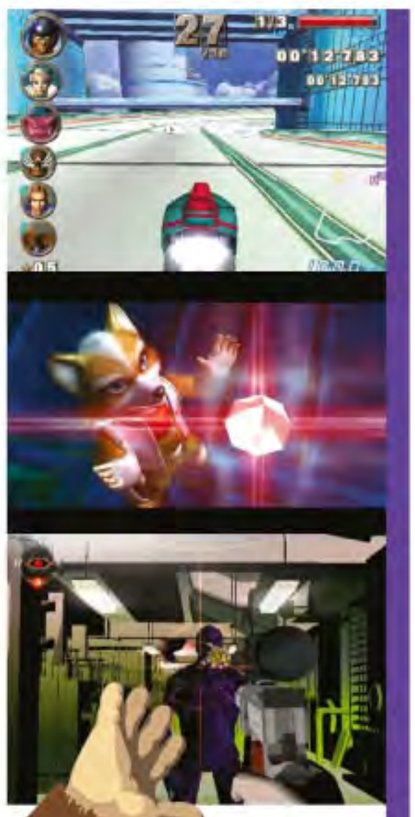
■ The WaveBird offered wireless gaming a generation before Sony and Microsoft. A small receiver plugs into the joypad port on the console, while the pad itself has an operational range of around 20 feet.

ASCII KEYBOARD CONTROLLER

■ This looks like someone has snapped a GameCube pad in two and stuck the halves onto either end of a keyboard. Despite this look, it was useful for inputting text in *Phantasy Star Online*.

LINK CABLE

■ Many titles – such as *The Legend of Zelda: Four Swords Adventures* – allowed players to connect Game Boy Advance consoles to their GameCube systems to unlock additional features – such as second-screen gameplay.



» *Mario Kart Double Dash!!* flaunted the GameCube's ability to kickstart any local-multiplayer session with ease.

▶ the GameCube that the survival horror outing would also be coming to Sony's console at a later date, an announcement which seriously undermined sales of the Nintendo version. In the end, the only title out of the fabled 'Capcom Five' to remain GameCube exclusive was *P.N.03* – the fifth game, *Dead Phoenix*, was cancelled in 2003 and Suda51's *Killer7* launched on the GameCube and PlayStation 2 at the same time. Capcom's commitment to the GameCube had been a massive shot in the arm for Nintendo and seemed to suggest that the console was more than capable of giving the PS2 a run for its money in terms of sales figures, but by going back on the deal, the publisher dealt a blow to the GameCube's fortunes, as well as its standing in the eyes of the games industry. PlayStation 2 owners had little reason to invest in Nintendo's system when titles like *Resident Evil 4* were coming to their console anyway, and this move robbed the GameCube of the momentum it crucially needed to attract more buyers.

» *Mario Sunshine* didn't hit the acclaim of *Mario 64*, but it was still a commendable, and great-looking, platformer.

"Developers simply weren't willing to spend the time and money to port their games over to the GameCube"

Phil Tossell

The GameCube's eventual install base totalled around 22 million units, way behind the PlayStation 2's 153 million and a shade behind the Xbox's 24 million. As is often the case, a combination of factors contributed to its lackluster performance, but some stand out more than others. "I believe the GameCube struggled because there just wasn't the variety of content," says Phil. "The Xbox and PS2 were largely comparable power-wise and many developers simply weren't willing to spend the time and money to port their games over to the GameCube for the relatively small returns. Nintendo were left to support the console all on their own and it just wasn't enough for a wider audience."

While the GameCube appeared to be the next step in Nintendo's downward trajectory – following the N64 which sold 33 million compared to the 49 million units of its forerunner, the SNES – it would lay down the framework for Nintendo's most successful home console ever, and that is perhaps its most enduring legacy. Despite its innovative motion-sensing control system, 2005's Wii was an evolution of the GameCube in purely technical terms, boasting the same core components. It would go on to sell over 100 million units, despite the that both the PS3 and Xbox 360 were significantly more powerful and offered impressive HD visuals.

While the GameCube failed to place Nintendo on top during its active life, its eye-catching design, extensive range of unique peripherals and – perhaps most important of all – its selection of excellent first-party Nintendo releases have ensured that in recent times it has enjoyed something of a modest resurgence among collectors. The console's unique Japanese software packaging – which consists of a small, clear plastic case with a card sleeve – makes it incredibly appealing for import buyers, while the bright orange 'Spice' variant of the system and the super-exclusive Panasonic Q fetch respectable prices online. Overall, the GameCube is actually one of the more affordable retro systems when it comes to collecting, and it's possible to purchase a console and a selection of good games for a price that won't leave your wallet feeling too empty. Expect that to change over the next few years as its popularity increases, though.

The GameCube may have been overshadowed by its commercially-successful successor, but while the Wii was an underpowered, left-field champion, the GameCube marked the last time that Nintendo truly tried to fight on even technological terms with its rivals and balk to industry trends and offer something that was deemed more 'safe' and 'mainstream'. When it came to raw power it was more than a match for the PlayStation 2 and Xbox, but this parity and the Nintendo name simply wasn't enough to bring results – in terms of sales, at least. Nintendo went back to the drawing board for the Wii and decided to offer players an experience which simply couldn't be replicated anywhere else, and that ethos has continued right up to the present day. ✱

» Sega made a home for itself on its former rival's console.

WHAT MADE IT GREAT

UNIQUE DISCS

■ The proprietary optical discs were designed to deter piracy.

COMPACT CASING

■ The GameCube was refreshingly compact and even had a carry handle.

FOUR PORTS

■ The GameCube was perfect for parties, all you needed was the controllers.

PARITY OF POWER

■ Despite its small size, the Cube could match its rivals.

UNIQUE COMPATIBILITY

■ You could play GBA, GBC and original Game Boy games via a special adapter.

WHERE IT FAILED

POOR THIRD-PARTY SUPPORT

■ Nintendo failed to secure consistent third-party deals.

SMALL DISC CAPACITY

■ 1.5GB games were modest, but the rivals had more space.

TOO FOCUSED ON THE FAMILY

■ The design was seen by some as too kid-friendly.

NOT ENOUGH ONLINE

■ It didn't support the online console gaming scene enough.

NO INTERNAL STORAGE

■ The GameCube's memory cards were a mess.

Resident Evil 4

CAPCOM IS GOING TO DO WHAT?

» RETROREVIVAL

» GAMECUBE
» 2005
» CAPCOM

I was working on games™ when we had our first briefing about *Resident Evil 4*. We knew that the final game wasn't going to be the same as what had been showcased in 2002, but as we went through the checklist of changes Capcom had sent us, we still didn't believe the game would be that different. "No zombies," read the list, "Individual body parts can be targeted", "Leon will be able to ride boats" – the list of improbable things went on and on and it sounded, quite frankly, nothing like a *Resident Evil* game.

When I finally clamped my eyes on *Resident Evil 4* in our game room a short time later I immediately looked under the table the GameCube debug unit was placed on, because I couldn't believe what my eyes were showing me. It looked absolutely incredible, and like no other game I'd seen up to that point. In fact, it still manages to impress me today.

There's a reason Capcom has shamelessly rereleased *Resident Evil 4* multiple times in the years since its original debut – it remains one of the best action games ever made. Yes, its movement feels a little clunky after experiencing the macabre delights of games such as *Dead Space*, and yes, the textures might look a little basic today, but the pacing, the boss battles, the QTE cut-scenes… Every single aspect of Capcom's game is as magnificent today as it was in 2005. Its influence can be seen in everything from *Gears Of War* to *Dead Space 2* and it harks back to a time when developers still weren't afraid to take big risks. A true masterpiece that every gamer needs to experience.

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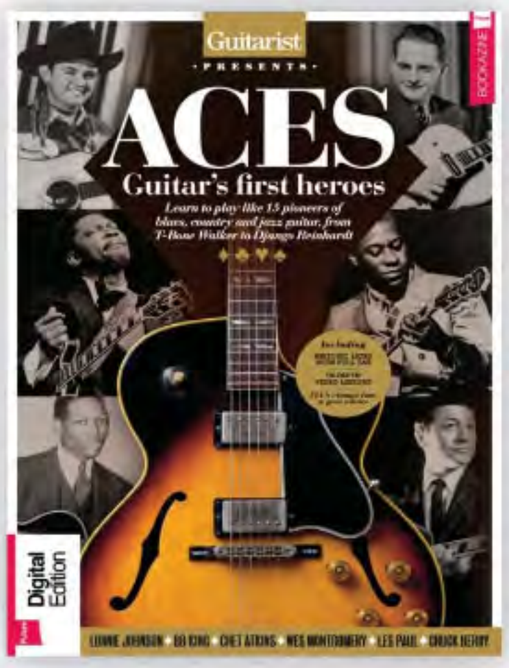
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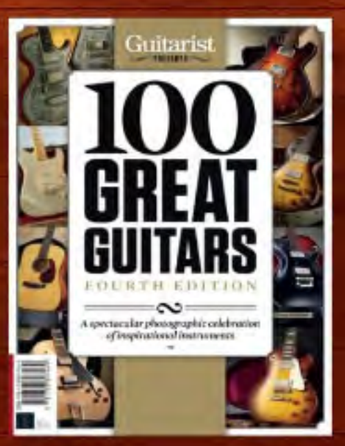

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